

**AN EVALUATION
OF THE JACOX ELEMENTARY SCHOOL IMPROVEMENT PROGRAM**

by

Lynne Hagens Meeks

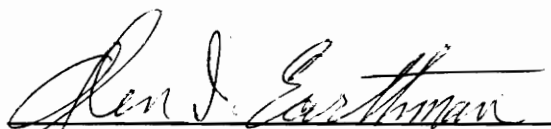
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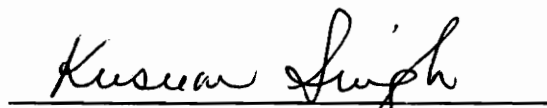
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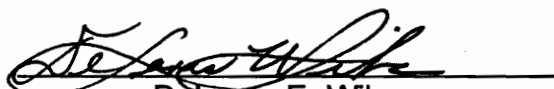
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Committee Co-Chairmen: Glen I. Earthman and Kusum Singh
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(ABSTRACT)

The purpose of this study was to evaluate the Jacox Elementary School Improvement program to determine the extent to which the program was effective in achieving its goals. The study sought to answer the major research question: Is the Jacox Elementary School Improvement program successful in achieving its stated goals? and to answer three subquestions: 1) Did the students improve academically?, 2) Was the self-concept of students improved?, and, 3) Was the school climate as perceived by students and teachers positively changed?

Instruments were selected to measure the areas examined. Three instruments were used to assess student academic achievement: 1) the Iowa Tests of Basic Skills, 2) the communication skills and mathematics portions of the criterion-referenced tests, and 3) the reading comprehension portion of the Virginia State Literacy Predictor Tests as well as the final report card grades for communications skills and mathematics. The Piers-Harris Children's Self-Concept Scale was used to assess the self-concept of students. The Student Survey for Jacox Elementary's Climate Correlate was used to assess

the school climate as perceived by students. The National Association of Secondary School Principals Teacher School Climate Survey was used to assess the school climate as perceived by teachers. Teacher interviews were conducted to gather qualitative data.

The findings showed that:

- When certain assessment measures were used, students in some grade levels improved academically.
- There were no significant differences between the pretest and posttest means of the Piers-Harris Children's Self-Concept Scale.
- Both students and teachers reported an improvement in the climate of the school.
- Student and teacher attendance improved over the previous year.

The preponderance of evidence indicated that the Jacox Elementary School Improvement program did not meet its stated goals. The fact that the program was assessed for one academic year provided one explanation for the research findings.

ACKNOWLEDGEMENTS

Special acknowledgement and appreciation are extended to the Co-Chairpersons of my dissertation committee, Dr. Glen I. Earthman and Dr. Kusum Singh. My appreciation also is extended to the remaining members of my committee, Drs. Wayne Worner, Robert Richards, and DeLores Wilson. In addition, special appreciation is extended to the principal of Jacox Elementary School, Mrs. Sharon Margulies; the assistant principal, Mrs. Lillian Akers; and all of the teachers who gave of their time and shared their feelings and thoughts.

My gratitude is extended to the members of the Norfolk Public Schools department of research, testing, and statistics including Dr. Aaron Gay, Mr. Davis Moore, Mr. Darrell Kennedy, and Mrs. Lillian Holloway. Finally, I extend my gratitude to Drs. Thomas Lockamy and Margaret Saunders for approving the evaluation study.

DEDICATION

This dissertation is dedicated to my loving and supportive family.

My husband,
John Tucker Meeks

My grandparents,
Roger and Lillian Harris

My sister,
Kathleen "Kappy" Hagens

My mother,
Beverly Harris Hagens

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CHAPTER 1

Introduction

In 1988, the Carnegie Foundation's special report, An Imperiled Generation: Saving Urban Schools, declared,

America must confront, with urgency, the crisis in urban schools. Bold, aggressive action is needed now to avoid leaving a huge and growing segment of the nation's youth civically unprepared and economically unempowered. This nation must see the urban school crisis for what it is: a major failure of school policy, a piecemeal approach to a problem that requires a unified response (p. xv).

Urban educators are often faced with the challenge of educating children living in poverty (U.S. Department of Education, 1990). Children living in poverty often experience physical and emotional handicaps, lack of health care, poor nutrition, difficult family conditions, and violent neighborhoods (Hodgkinson, Duttz, & Obarakpor, 1992). Such children are at risk of school failure and have few resources they can bring to school. These students often are students whose parents lack high school diplomas, students from one-parent homes, teenaged students who become parents, and students who know few people who have benefited from education. To educators these home factors are risk indicators. Each risk factor increases the likelihood that the families will have children who do poorly in school (Sirotnik, 1991).

The benefits of a good education touch the entire nation. Communities with better educated adults tend to have higher than average incomes and

fewer poor children than communities where the adult education level is low (U.S. Department of Education, 1990). Many educators feel that good schooling is every citizen's opportunity for success in life. An educated citizenry provides the nation with a work force prepared to excel in a post-industrial society. Ignoring the problem of educating our urban poor results in a high cost to United States taxpayers (Center for Education Research at Stanford University, 1981; The National Education Association, 1987; The Carnegie Foundation for the Advancement of Teaching, 1987). A comparison of national, state, and local statistics of the leading risk factors which may lead to school failure indicate that urban schools have a high concentration of at-risk students and, therefore, need more urgent measures to address these risk factors (Sirotnik, 1991).

Nationally, everyday 1,340 babies are born to teen mothers; everyday 2,754 babies are born out of wedlock; and everyday 2,685 babies are born into poverty. Research indicates that African Americans are particularly at risk of school failure. An African American female teenager is more than twice as likely as her Caucasian peer to have a baby; one African American teenager in every two lives with only one parent; and one African American teenager in every three lives with a parent who did not graduate from high school (Children's Defense Fund, 1991). High school dropout rates are near 15 percent among African Americans and only slightly over 10 percent among Caucasians; nearly 90 percent of Caucasians can read at the intermediate

level of proficiency, whereas the figure is about 65 percent for African Americans; and writing performance scores and mathematics achievement for Caucasians are above average, whereas those for African Americans are below average. Since nearly three quarters of all African Americans populate the inner cities of this nation, all of these comparisons are magnified in urban school statistics (Sirotnik, 1991).

In Virginia, every 38 minutes an infant is born into poverty; every 24 minutes an infant is born to an unmarried mother; and every 50 minutes an infant is born to a teenaged mother (Virginia Coalition for Child Abuse Prevention, 1992). In 1992, nearly one in 10 new Virginia families had all three risk factors related to school failure--the mother was a teenager, had not finished high school, and was unmarried (Center for the Study of Social Policy, 1992). In a recent study conducted by the Virginia Department of Education (1992) on the educational attainment of students living in poverty, the research findings concluded that school divisions with high rates of student poverty tend to have lower achievement test scores, higher absenteeism, and higher dropout rates. The measure of student poverty used most frequently by the Virginia Department of Education is the count of students approved for free and reduced lunches in the National School Lunch program. The percent of Virginia's school children who would be deemed at risk of educational failure because of circumstances of student poverty as measured by qualifications for the federal free lunch program was 19.1 percent in 1991. A large portion of

children living in poverty reside in Virginia's inner cities, one of which is Norfolk (Virginia Department of Education, 1992).

While Norfolk city as a whole is predominantly middle class (School Division Data, 1992), the Norfolk school division serves a core city with a poor socioeconomic picture (Virginia Department of Education, 1992). Of the students enrolled in Norfolk Public Schools, 61 percent are eligible for free or reduced lunches (School Division Data, 1992). The school division has a dropout rate of 6.31 percent, compared with a state dropout rate of 3.26 percent (Virginia Department of Education, 1992). The high number of students eligible for free and reduced lunches, the dropout rate, and the high number of minorities served by an urban school division are indicators that a high number of students of Norfolk Public Schools are potentially at risk of school failure.

In order to address the barriers to student achievement faced by urban learners, Norfolk Public Schools implemented a multiple intervention school improvement program at one of its all minority elementary schools, Jacox Elementary School. This particular school was selected because its students' profiles reflect the alarming statistics outlined in such documents as An Imperiled Generation (1988).

...disadvantaged minorities, frequently the products of homes where books and newspapers are scarce, where the level of spoken language is low, and where the value of education is not stressed by parents who are themselves more often than not ill-educated (p. 41).

The main objectives of the school improvement program at Jacox Elementary School were an outgrowth of a divisionwide task force established in 1991 to address concerns of the school board that the school division was not providing all of its students with the opportunity for improved academic achievement. It believed that academic achievement for every student attending a community school (formerly referred to as target schools) was not a reality and, therefore, needed to be addressed forthrightly and candidly. The task force members believed,

...if the mission--to improve academic achievement of students in community schools--is to be accomplished, then change in attitudes, expectations, beliefs, and operating as usual must occur (Task Force Report for Improving Academic Achievement in Community Schools, 1992, p. 11).

Based on concerns expressed by the principal of Jacox Elementary School regarding student academic achievement, the assistant superintendent for elementary schools recommended to the superintendent that Jacox be one of the first community schools to put into action the task force's recommendations. With the school board's approval, the process of change for Jacox Elementary School began during the summer of 1992.

Statement of the Problem

The Jacox Elementary School Improvement program needed to be evaluated. This study was conducted to evaluate the Jacox Elementary

School Improvement program by researching the program and answering the following question and subquestions:

Is the Jacox Elementary School Improvement program meeting the stated goals?

Subquestions:

1. Did students improve academically?
2. Was the self-concept of students improved?
3. Was the school climate as perceived by students and teachers positively changed?

Significance of the Study

In a world of finite resources, school divisions have to make some choices about how to best use their resources for the good of their community and society. An evaluation of the Jacox Elementary School Improvement program assisted decision makers in one school division in determining whether the investment in specific school improvement interventions justified continuation or modification of the program.

Limitations

Any conclusions or implications made from this study are limited by the following factors:

- This program evaluation study cannot be generalized to other school improvement intervention programs.
- This study cannot be compared with studies of other intervention programs to determine similarities of success.

Definitions of Terms

School Improvement--A divisionwide and schoolwide commitment to improving student academic achievement.

Multiple Intervention--Several intervention strategies designed to complement one another in an effort to improve student academic achievement.

Education Program Evaluation--The process of providing useful information for making judgments about the value or worth of educational programs for the purpose of determining 1) how the program is operating; 2) the degree to which the program is meeting its stated goals; 3) the program's strengths and weaknesses; 4) whether to continue or alter existing policies; and 5) whether to eliminate, expand, or modify current practices (Herman, Morris, & Fitz-Gibbon, 1987).

Jacox Elementary School Improvement Program--A multiple intervention program designed for school improvement. The three areas targeted for improvement included 1) student academic achievement, 2) the self-concept of students, and 3) the school climate as perceived by students and teachers.

The interventions included 1) appointing a new building administrator, 2) selecting a new professional staff, and 3) adding teacher incentives.

Organization of the Study

This study is organized into five chapters. Chapter 1 includes the introduction, statement of problem, purpose of the study, significance of the study, limitations, definitions of terms, and the organization of the study. Chapter 2 includes a review of the literature as related to program evaluation and the components of this school improvement program. Chapter 3 describes the methodology, the Jacox Elementary School Improvement Program, stated goals of the program, organization of the goals, research design, the subjects, instrumentation, data collection procedures, and data analysis. Chapter 4 presents the analyses of data and reports the findings. Chapter 5 contains the summary, discussion, and recommendations. Following Chapter 5 are the bibliography, appendices, and vita.

CHAPTER 2

Review of Literature

Why is educational evaluation important? What is the difference between evaluation and research? What is program evaluation and why is it important? What do we know about single- and extreme-case studies? A review of the literature will focus on these questions as well as related areas of evaluation.

Without careful, systematic inquiry into the effectiveness of either current school practices or new programs, many changes occurring in education become little more than random adoption of faddish innovations. ...Though it is just one step toward educational improvement, evaluation holds greater promise than any other approach in providing educators with information they need to help improve educational practices (Worthen & Sanders, 1987, pp. 3-4).

Evaluation in the United States has emerged as a major methodology for social planning and change (Norris, 1990). Systematic evaluation is increasingly used to guide procedures, to assure decision makers that they are moving in a wise direction, and to ensure services are responsive to their publics (Cronbach, Ambron, Dornbusch, Hess, Hornik, Phillips, Walker, & Weiner, 1980). Evaluation has been applied to a variety of disciplines-- psychology, sociology, cultural anthropology, economics, and jurisprudence (Norris, 1990). The field of educational evaluation developed dramatically over the past thirty years. The field's development was stimulated by the evaluation requirements of the Great Society programs that began in 1965; by the

nationwide accountability movement that began in the 1970s; and by the responsibilities for solving social problems that society has assigned to educators in the 1980s and 1990s (Madaus, Scriven, & Stufflebeam, 1983).

Educational evaluation can provide reliable information about the performance of educational products, practices, and programs. This information can provide teachers and school administrators with indications about how well they are doing. Also, this information can be used to inform parents about the curricula and teaching methods used to instruct their children. Additionally, the information gained from educational evaluation can be used to inform citizen groups about the results that is being achieved through schools' expenditures of public funds. Because educational evaluation can help provide this information, it has gained widespread acceptance in education (Worthen & Sanders, 1987). Exploring the topic of educational evaluation requires an understanding of 1) the meaning of the term; 2) the differences between evaluation and research; 3) the differences between quantitative and qualitative methods; 4) the significance of program evaluation; 5) a historical overview of the development of program evaluation in the United States; 6) the roles of evaluation; 7) some models of program evaluation; and 8) the soundness of single- and extreme-case studies.

Terminology

Several terms need to be defined in order to understand what educational evaluation involves. Worthen, Borg, and White (1993) stated that measurement, testing, assessment, and evaluation are closely intertwined activities that are not easily separable. Yet there are important distinctions among them that make it useful to separate them. Measurement is the process of making empirical observations of some attribute, characteristic, or phenomenon. The observations are translated into quantifiable form according to clearly specified procedures. Measurement is a process for collecting the data on which research generalizations or evaluation judgments will be made. It is an essential element in evaluation and research processes (Worthen & Sanders, 1987).

To most classroom teachers, evaluation means testing. Teachers have used the term interchangeably. Teachers have said, "I shall evaluate my students" or "I shall test my students." A test can be defined as "a set of tasks or questions presented to an examinee in a systematic procedure and used to elicit a sample of the examinee's behavior on the attribute or characteristic of interest" (Worthen, Borg, & White, 1993, p. 67). According to Worthen, Borg, and White (1993), testing is one form of a measurement tool used in evaluation and research.

For most educators, the term assessment is used interchangeably with measurement (Popham, 1988). Assessment can be used to refer to either

1) assessment of the performance of individual students or 2) assessment of the performance of entire educational systems. Student assessment is an activity which encompasses both measurement and testing. Assessment of individual performance is the process of collecting data to make decisions about students. Such assessment data may be in the form of quantitative data or qualitative data (Worthen & Sanders, 1987). Whereas testing typically seeks to compare individual scores, system assessment disregards individual student scores and concentrates on the whole system or broad subgroups in the system such as all second graders. Worthen and Sanders (1987) defined system assessment as "the use of specially constructed tests to determine the overall condition of an entire system." Best and Kahn (1989) defined assessment as a fact-finding activity that describes conditions which exist at a particular time. No hypotheses are proposed or tested, no variable relationships are examined, and no recommendations for action are suggested.

Worthen, Borg, and White (1993) defined evaluation as "the determination of a thing's worth, value, or quality." Best and Kahn (1989) stated that evaluation is concerned with the application of its findings and implies some judgment of the effectiveness of a product, process, or program in terms of carefully defined objectives. Evaluation involves gathering information in a systematic way, interpreting that information, and making judgments about the worth of an education program or project which should lead to better policies and practices in education (Wolf, 1990). Evaluation may

involve recommendations for action; however, it is not concerned with generalizations that may be extended to other settings. Unlike evaluation, research is concerned with all of the following: hypothesis formulation and testing, the analysis of the relationships between nonmanipulated variables, and the development of generalizations. According to Best and Kahn (1989), it is the last characteristic that most distinguishes research from evaluation.

Differences Between Evaluation and Research

Although terms such as measurement, testing, and assessment are often used to describe evaluation, the activity that is most often mistaken for evaluation is research. The distinctions between these two activities will assist evaluators in better understanding the nature of systematic evaluation (Popham, 1988).

Evaluation and research are often confused because there are many similarities between the two activities. They both 1) use measurement devices, 2) analyze their data systematically, 3) describe their endeavors in formal reports, and 4) rely on a technical set of tools. Even with all the similarities, there are substantial and significant differences between the two activities (Popham, 1988). "Research and evaluation are generally undertaken for different reasons. Research satisfies curiosity by advancing knowledge; evaluation contributes to the solution of practical problems through judging the value of whatever is evaluated. The researcher is intrigued; the evaluator is

concerned. Research seeks conclusions; evaluation leads to decisions" (Worthen & Sanders, 1987, p. 29).

The major distinction between evaluation and research is the generalizability of the phenomena being studied. Although generalizations can be made from evaluation, it is extremely difficult due to the diversity of purpose. For example, one type of evaluation used in education, program evaluation, is concerned with a phenomenon such as an educational program that has limited generalizations from setting to setting and from time period to time period. Such a phenomenon is dynamic; that is, it is in operation, changeable, and taking place in a specific setting. Such an educational program may serve a student population unique to a particular school which would be of little relevance to another school setting (Worthen & Sanders, 1987). Whereas, "research focuses on concepts supposed to be relatively permanent, applicable to schooling nearly everywhere, and relevant to numerous teaching and learning contexts" (Worthen & Sanders, 1987, p. 32).

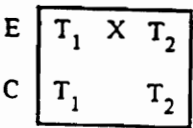
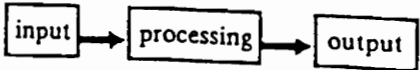
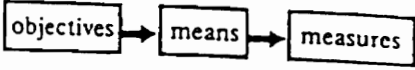
Isaac and Michael (1981) stated that research has its origin in science while evaluation was an outgrowth of technology. Research is oriented toward the development of theories in which hypotheses are derived, put to a test under controlled conditions, and generalizations are made. Evaluation, on the other hand, is to provide feedback leading to a successful outcome defined in practical terms. Its general steps are 1) setting objectives; 2) designing the means to achieve these objectives; and 3) constructing a feedback mechanism

to determine progress toward, and attainment of, the objectives established at the outset of the evaluation. In essence, evaluation typically is associated with how effective or ineffective, how adequate or inadequate a given phenomenon is in terms of the information provided by an evaluator. Researchers are answerable to the scientific community while evaluators are commissioned and must answer to their clients and stakeholders (Smith & Glass, 1987). The distinction between research and evaluation is outlined in Figure 1.

Evaluation Methodology

The best methodology to use to conduct educational evaluation has been debated for over thirty years. In the late 1950s and 1960s many of the educational researchers were trained in the scientific method, thus the experimental design became the most widely accepted evaluation approach (Worthen & Sanders, 1987). This approach uses various tests and scales, questionnaires, and other formal instruments. It is commonly referred to as quantitative methods. Its origin is positivistic in nature. Positivism, among other things, stresses the existence of an objective reality. Evaluators who are more allied with a positivistic approach are most inclined to use quantitative methods (Wolf, 1990).

During the 1960s, another evaluation method, qualitative methods, was considered unacceptable for educational research because it was not considered to be objective. Qualitative methods gained wider acceptance in

	Research	Evaluation
CHARACTERISTIC:		
Purpose	New Knowledge, Truth	Mission Achievement, Product Delivery
Outcome	Generalizable Conclusions	Specific Decisions
Value	Explanatory and Predictive Power	Determining Worth and Social Utility
Impetus	Curiosity and Ignorance	Needs and Goals
Conceptual Basis	Cause and Effect Relationships	Means-Ends Processes
Key Event	Hypothesis Testing	Assessing Attainment of an Objective
Classic Paradigms	1. Experimental Method 	1. Systems Approach 
	2. Correlational Method r_{xy}	2. Objectives Approach 
Discipline	Control and Manipulation of Variance	Program Planning and Management
Criteria	Internal and External Validity	Isomorphism (fit between the expected and the obtained) and Credibility
Functional Types	Pure and Applied True Experimental Quasi-experimental	Formative - Summative Process - Product

Reproduced with Permission. Isaac, S. & Michael, W. (1983). Handbook in research and evaluation. EDITS Publishers, San Diego, CA.

Figure 1. Two Types of Disciplined Inquiry

the 1970s when educational evaluators began to search for alternatives to the quantitative approach (Worthen & Sanders, 1987). Qualitative methods are sometimes referred to as postpositivistic. Evaluators allied with a postpositivistic philosophy may make use of such techniques as interviews, observations, and case studies (Wolf, 1990). These techniques were borrowed from the ethnographic and field study of anthropology and sociology (Patton, 1987). Both quantitative and qualitative methods have a place in educational evaluation. The choice of method depends on the purpose to be served (Mark & Shotland, 1987).

Quantitative Methods

Quantitative inquiry establishes a large theoretical perspective then focuses on the testing of specific hypotheses that are smaller parts of this perspective. This inquiry approach follows experimental design and statistical methods of analysis (Herman, Morris & Fitz-Gibbon, 1987). The statistical analysis focuses on numbers and findings are reported in statistical terms (Worthen & Sanders, 1987). Before deciding on a final research design and instrument, quantitative researchers might conduct pilot work and revise the design many times; however, once they begin to gather data no revisions are made (Mark & Shotland, 1987). The primary concern with quantitative approaches are "with measuring a finite number of prespecified outcomes, with judging effects, with attributing cause by comparing the results of such

measurements in various studies, and with generalizing the results of the measurements and the results of any comparisons to the population as a whole" (Herman, Morris, & Fitz-Gibbon, 1987, p. 19). The broad, generalizable set of findings generated through quantitative methods is considered to be one of the major advantages of this type of inquiry approach (Patton, 1987).

Qualitative Methods

Qualitative methods are used when evaluators wish to study selected issues, cases, or events in depth. This method of inquiry produces much detailed data on a smaller number of people or cases than would be produced by quantitative data. The depth and detail of data are provided through such means as direct quotations, careful description, and case documentation. In qualitative methods, there is no attempt to fit data into predetermined, standardized questionnaires or surveys (Patton, 1987). The evaluator engages in fieldwork or participant observation and uses interviews, documents, and observation. The evaluator is the key instrument for data gathering and analysis (Benson & Michael, 1986; Worthen & Sanders, 1987). The quality of the qualitative evaluation is dependent on the skill of the evaluator. A well-trained evaluator increases the accuracy, validity, and reliability of the qualitative study (Patton, 1987).

Qualitative researchers begin their investigation with a hunch. As they proceed, they continually revise their hunches. During the data collection

phase, they make daily changes in their choice of questions to ask and to whom the questions should be directed (Mark & Shotland, 1987). Data are analyzed inductively, from the parts to the whole (Tuckman, 1985). The emphasis is on detailed description and on in-depth understanding as it emerges from direct contact with the study participants (Herman, Morris, & Fitz-Gibbon, 1987). With this type of research method, "there is a need to set boundaries and find a focus in order to ensure that the process is credible, fitting or appropriate, consistent, and confirmable or neutral" (Tuckman, 1985, p. 190). By collecting and analyzing data from several sources, the evaluator is able to corroborate his observations and conclusions (King, Morris, & Fitz-Gibbon, 1987). Critics of qualitative methods believe this approach requires skill beyond what most evaluators possess. In addition, there are concerns about interrater reliability and small sample size. Advocates of qualitative methods believe the evaluators' recommendations often yield highly practical and relevant findings (Patton, 1987).

Wolf (1990) believed that the two approaches can be regarded as complementary. He suggested that even experimental studies with large amounts of quantitative data could benefit from the use of qualitative data gathered through the use of observation or interviews. Other research analysts have discussed the advantages of integrating both methods within an educational evaluation (Guba & Lincoln, 1981; Worthen & Sanders, 1987). Recent reports on the topic indicate that researchers are beginning to view

inductive and deductive research methods as points on a continuum with a variety of possibilities in between (Mark & Shotland, 1987).

Program Evaluation

One type of educational evaluation, program evaluation, is used frequently by educators. Program evaluation can play an integral role in improving program operations. Well-conceived and well-designed program evaluations can provide valuable insights into 1) how programs are operating; 2) the extent to which the programs are serving their target populations; 3) the programs' strengths and weaknesses; 4) the programs' cost-effectiveness; and 5) the programs' merits for future use. Program evaluations can help to set priorities, guide the allocations of resources, facilitate the modification and refinement of programs, and indicate the need for personnel and resources. Additionally, program evaluation can help decision makers at all levels to assess and improve the quality of their programs (Herman, Morris, & Fitz-Gibbon, 1987). A historical overview of the development of educational program evaluation in the United States will provide an understanding of the significance of this type of educational evaluation.

Historical Overview

While a definitive history of educational program evaluation has yet to be written, an awareness of its known history can lead to an understanding of

how and why this field of evaluation has developed as it has. The first period of development for educational evaluation began in the early 1900s. The publication of The Principles of Scientific Management by Frederick Taylor in 1911, marked the influence of Taylor's ideas of standardization, systematization, and scientific method (Madaus, Scriven, & Stufflebeam, 1983). Taylor's ideas were brought to the attention of educators and school administrators through the Twelfth Yearbook of the National Society for the Study of Education--The Supervision of City Schools (1913). During this time in American history, the nation was experiencing an industrial revolution. Millions of immigrants entered the United States. Education represented a way to assimilate these immigrants into the dominant culture. The progressive educational reformers of the early 1900s thought that scientific management ideas were a solution to the problem of managing individuals. This need to manage people was a result of the perceived problems caused by rapid urbanization. To respond to the perceived need, a powerful alliance of business and professional elites led a drive to reform American education (Norris, 1990).

Because of compulsory schooling and child labor laws, young people stayed in school longer as opposed to dropping out to go to work (Tyack, 1974). The secondary school became popular and took on new tasks like teaching English and offering vocational courses. Secondary schools were no longer just preserved for the small number of students who would attend

college. In many cases, the secondary schools began teaching basic skills in citizenship as well as the classical knowledge courses (Wiles & Bondi, 1984). Scientific management principles offered a way to monitor school and teacher efficiency. The use of standardized tests became a popular trend.

At first standardization could be seen in the use of survey tests which were often developed by large school districts to improve the efficiency of the school district. This monitoring role was in keeping with the scientific management principles being used in industry. By 1915, over 30 large school districts were using surveys to determine school and teacher efficiency in all phases of educational life. A number of these surveys employed newly developed objective tests. Eventually the tests took on a norm-referenced character as the percentage of students passing became a standard by which teachers could judge whether their classes were above or below the general standard for the district. In addition, well-known researchers of the day developed tests geared to compare one school district with another. After World War II, school districts used standardized achievement tests to make inferences about program effectiveness. From its beginning, evaluation has been closely linked with testing. Test data have often been the principal data source in evaluations (Madaus, Scriven, & Stufflebeam, 1983). At this time, evaluation was synonymous with measurement and testing (Norris, 1990).

The second period of development for evaluation was during the Great Depression. During the Great Depression, John Dewey and others tried to

renew education. The renewal came to be known as the Progressive Education Movement (Madaus, Scriven, & Stufflebeam, 1983). The Progressive Education Association wanted to change the secondary school curriculum in order to make it more relevant to the needs of the students. Some colleges refused to admit progressive school graduates because they lacked credits in certain subjects (Norris, 1990). Critics of the progressive secondary schools argued that students educated in progressive high school curricula would perform poorly in college when compared to students educated in conventional curricula (Worthen & Sanders, 1987). In April 1930, the Progressive Education Association met in Washington, D.C., to discuss the controversy (Norris, 1990).

The Progressive Education Association established a Commission on the Relation of School and College. The aim of the commission was to explore possibilities of better coordination of school and college work and to seek agreement which could provide freedom for secondary schools to attempt fundamental restructuring. In 1932 the commission put forward a proposal for a sound experimental study of secondary education. This proposal became known as the Eight-Year Study. A small number of secondary schools were to develop educational programs appropriate to the needs of their students. These programs were developed without regard to college entrance requirements for collecting and reporting information on what students were learning so as to help colleges select candidates for admission (Norris, 1990).

Over 300 colleges agreed to waive their traditional entrance requirements for graduates from about 30 progressive secondary schools. In essence the high school and college performance of students from these secondary schools would be compared to the high school and college performance of students from a group of traditional secondary schools (Madaus, Scriven, & Stufflebeam, 1983). Ralph Tyler, a professor at Ohio State University with the Bureau of Educational Research, was invited to direct the evaluation staff of the Eight-Year Study which ran from 1932 to 1940 (Popham, 1988).

The Eight-Year Study introduced educators throughout the United States to a new view of educational evaluation. This view was broader than that which had been popular up until this time (Madaus, Scriven, & Stufflebeam, 1983). In Tyler's report on appraising student progress, he commented that the term evaluation was used rather than measurement, test, or examination because evaluation implied a process by which the values of a program or project are determined. The term evaluation has been attributed to Tyler. For Tyler and his staff, one important purpose of evaluation was to make periodic checks on the effectiveness of schools and indicate points in the school's program where improvements were necessary. "Under Tyler's direction, the evaluation staff of the Eight-Year Study developed a theory of evaluation which was simple, powerful, and so thoroughly integrated with the process of curriculum construction that it blurred the boundaries between development and evaluation" (Norris, 1990, p. 18). Tyler believed that curriculum should be

stated as objectives to be achieved. Evaluation then became a matter of finding out whether the stated objectives were met--a comparison of intended outcomes with actual outcomes (Madaus, Scriven, & Stufflebeam, 1983). Tyler saw evaluation as an integral part of the educational process and not as just a means to satisfy the requirements of a funding agency (Wolf, 1990). In reporting their work on the Eight Year Study, Tyler and his staff provided an evaluation manual that was to dominate thinking in educational evaluation for twenty-five years (Worthen & Sanders, 1987).

The third period of the development of educational evaluation began when the Russians launched Sputnik, the first space satellite, in October 1957 (Knezevich, 1984). Sputnik became a source of embarrassment to many Americans. With the launching of Sputnik, Americans believed that the Russians exceeded them in science and technology. As a result, the concept of the technological lag became popular. Since education was viewed as important to the national defense, educators were blamed for not doing their jobs effectively (Popham, 1988). This school of thought led to Congressional action in the form of the National Defense Education Act of 1958. The National Science Foundation and the United States Office of Education funded curriculum projects in science and mathematics and later expanded the funds to include English and social studies (Knezevich, 1984). This massive increase in federal support for curriculum improvement was accompanied by a growing interest in evaluation. This interest in evaluation was probably to

support future budget requests as much as to monitor the process and progress of curriculum development (Norris, 1990).

Millions of dollars were poured into the development of new educational programs. Funds were also made available to evaluate these curriculum development efforts. The few evaluation studies that resulted revealed the limited expertise in evaluation design, data gathering, analyses, and reporting (Worthen & Sanders, 1987). Complaints about existing methods of educational evaluation led Lee Cronbach to author in 1963 an important essay dealing with how educational evaluation might best be used in such curriculum development projects. During this time period, Cronbach's views failed to attract much interest because there was little interest on the part of American educators in evaluation (Popham, 1988).

The fourth period in the development of educational evaluation was also one of the most significant. In 1965 the United States Congress enacted legislation that was considered to be precedent-setting, the Elementary and Secondary Education Act. This Act was part of President Lyndon Johnson's war on poverty (Knezevich, 1984). Part of the Act provided a compensatory education program for disadvantaged children. Federal dollars to states and localities would be in the billions rather than the usual millions. Several legislators, including Senator Robert Kennedy, wanted to ensure that the funds were used as intended (Norris, 1990). In the final version of the Act, two of its five titles, Title I and Title III, stipulated that each project conducted under

support from those titles be evaluated and that such evaluations be reported to the federal government (Popham, 1988). This was the first piece of social legislation to mandate evaluation reporting (Berk, 1981). Some saw this mandate as a way of ensuring that federal dollars were actually spent on programs for the disadvantaged rather than on general aid to schools. Others viewed this evaluation component as a means of gathering information which might lead to more successful practices and more efficient federal decision making (Norris, 1990).

Prior to the mandate in the Elementary and Secondary Education Act, educators did not spend much time on evaluation. The amount of money involved created a powerful incentive for local educators. In other words, local educators had to evaluate a given year's Elementary and Secondary Act Title I and Title III projects if they desired to continue to receive the subsequent year's Title I and Title III money. Educators were untrained in educational evaluation and therefore lacked the necessary skills and experience (Benson & Michael, 1986; Popham, 1988). The early evaluation efforts did not please the Assistant Secretary for Program Evaluation at the United States Department of Health, Education, and Welfare. In addition to the lack of supporting data supplied in evaluation reports by the localities, several national studies (for example, the Coleman Study and the United States Commission on Civil Rights) began to cast doubts on the benefits of investing federal dollars in compensatory education as an anti-poverty strategy (Norris, 1990).

Under pressure to produce useful evaluation reports, educators sought assistance from outstanding educational scholars trained in other specializations. Interest in educational evaluation was intense. Any kind of writing on the topic commanded immediate attention. Scriven, a philosopher, and Stake, a psychometrician, saw a need and turned their attention to educational evaluation. Until the 1967 essays by Scriven and Stake, few writers, other than Tyler and Cronbach, had addressed themselves seriously to the topic of educational evaluation (Popham, 1988). In recent years, evaluations have become commonplace and have created a social research industry (Norris, 1990).

From the 1960s to the present, professional associations began encouraging their members to grant evaluation more serious attention. The United States government has provided more support for evaluation efforts by creating the Center for the Study of Evaluation in 1967 and the National Institute of Education in 1972. The professional literature in evaluation has grown during the past thirty years. A Joint Committee on Standards for Educational Evaluation, established in 1975, includes representation from most major professional educational associations in the United States. In 1981 this Joint Committee developed the Standards for Evaluations of Educational Programs, Projects, and Materials, the first organized statement of principles for sound educational evaluation (Norris, 1990).

The Roles of Evaluation

In his classic 1967 essay, Michael Scriven labeled two different roles served by educational evaluation including formative and summative. The labels quickly became popular to describe formative evaluation as an ongoing process as opposed to summative evaluation which provides an overall measure of a program's worth or merit (Popham, 1988). A description of each role will clarify their unique purposes.

Formative Evaluation

One of the formative evaluator's primary functions is to encourage constant scrutiny of assumptions and activities underpinning a program or activity (Fitz-Gibbon & Morris, 1987). For example, during the development of a new textbook, formative evaluation would involve input from a small number of experts as well as feedback from a larger number of practitioners in schools. Each step of the process would result in immediate feedback to the editors of the textbook, who would then use the information to make changes (Worthen & Sanders, 1987). Formative evaluation is popular because it is less threatening and more easily controlled than summative evaluation (Norris, 1990).

The formative evaluator works closely with the program staff and their joint efforts determine the course of the study (Herman, Morris, & Fitz-Gibbon, 1987). The evaluator is characterized as an advisor to the program developers. An important function of the formative evaluator is the ongoing

written and verbal feedback to the developers. This information is used by those involved in the program to help redirect resources into more productive avenues (Worthen & Sanders, 1988). Formative evaluation is used for the expressed purpose of improving the program before it is disseminated (Smith & Glass, 1987).

Summative Evaluation

Summative evaluators gather information regarding the worth or merit of a program (Worthen & Sanders, 1987; Popham, 1988). The summative evaluator is supposed to summarize the program's accomplishments. A written report focuses on the final program (Smith & Glass, 1987). This report could affect decisions about the program's future and, therefore, the evaluator should be able to back up his findings. Summative evaluations should have the characteristics of the best research studies. Evaluators should use highly valid and reliable instruments and evaluation designs. The evaluation should provide the best possible information that could have been collected under the circumstances, and this information should meet the credibility requirements of the intended audience (Fitz-Gibbon & Morris, 1987).

Summative evaluations may be used to document a study, provide a permanent record of the study, or offer a list of the possible causes of a program's effects. Program funding sources expect a final written report from the summative evaluator (King, Morris, & Fitz-Gibbon, 1987). The final report

leads to discussion concerning program continuation or modification (Worthen & Sanders, 1987). Generally, a program will not be terminated based on a summative report. Usually when the results are poor, recommendations are made for program improvement (Tuckman, 1985). The summative evaluator generally remains independent from the program staff. This independence is supposed to enable the summative evaluator to be free to report both positive and negative findings which is an essential element of evaluation credibility (Herman, Morris, & Fitz-Gibbon, 1987).

Some Models for Program Evaluation

There are a number of different conceptions about what evaluation means and how it should be done. Each model was developed to provide useful information based on the developers perspectives of evaluation (Stecher & Davis, 1987). According to Worthen and Sanders (1987), over 50 different evaluation models have been developed. Describing each of these models is not within the scope of this paper; instead, an overview of a selected few of the program evaluation models will be given.

Immediately following the enactment of the Elementary and Secondary Education Act of 1965, numerous evaluation models emerged. Because many of the models incorporated portions of previously developed models, it is difficult to categorize program evaluation models. Often one model is not truly distinct from another (Popham, 1988). For convenience, scholars in the field

of evaluation have tried to categorize the models. Models provide a language through which to describe evaluation. Models also help evaluators to focus on what is important for purposes of inquiry in order to help guide their actions (Norris, 1990). Several program evaluation models will be described including goal-oriented evaluation, goal-free evaluation, decision-oriented evaluation, expertise-oriented evaluation, and naturalistic and participant-oriented evaluation.

Goal-Oriented Evaluation

Ralph Tyler has been credited with developing goal-oriented evaluation. Tyler used this approach of evaluation during the Eight-Year Study in the late 1930s. In goal-oriented evaluation, Tyler emphasized the need to screen broad goals before using them as the basis for the evaluation. He used three sources to screen the broad goals which included philosophical, social, and pedagogical (Worthen & Sanders, 1987). Once the goals have been established, measurable objectives are linked to these goals (Stecher & Davis, 1987). At the conclusion of an instructional program, measurements of students are taken in order to see the degree to which the previously established goals were achieved. Unattained goals reflect deficiencies in the program. Attained goals reflect a successful program (Popham, 1988).

In the goal-oriented approach, the evaluator acts as a collaborator. In this capacity, the evaluator helps the program staff to state the program

objectives in clear, concrete, and measurable terms. Because of the relationship between the evaluator and the program staff, the evaluator does not maintain the degree of independence associated with other evaluation models. By working closely with the program staff, the evaluator can ensure that the objectives are in measurable terms which simplifies the assessment process (Stecher & Davis, 1987). This simplicity of design has made the goal-oriented model popular with program evaluators (Worthen & Sanders, 1987).

During the 1960s and 1970s, the use of criterion-referenced tests became a popular outgrowth of the goal-oriented approach to evaluation. The federal government established a program, The National Assessment of Educational Progress, designed to periodically collect data on student performance in the essential subjects of American education. It has become commonplace for each state to have its own statewide testing program to annually determine whether students have mastered objectives at particular grade levels. Advocates of the goal-oriented approach believe that this approach has improved measurement practices (Worthen & Sanders, 1987).

Critics of goal-oriented evaluation believe that this approach can result in a narrow focus which limits the evaluation. Some of the criticisms of this approach include that it lacks standards to judge the importance of observed discrepancies between objectives and performance levels; ignores important alternatives that should be considered; ignores the context in which the

evaluation takes place; and promotes a linear, inflexible approach (Stecher & Davis, 1987). The effective use of goal-oriented evaluation depends on whether the goals were worth attaining. Some goals that are attainable have little worth. Some goals are attained because they were set too low or had already been attained, not because the program was successful. The evaluator must be trained to assist a program staff with the development of appropriate goals and measurable objectives to strengthen the effectiveness of this approach (Worthen & Sanders, 1987).

Goal-Free Evaluation

In the late 1960s, the federal government was spending large amounts of money on education. Much of this federal money was being spent to support the newly created research and development centers located at major universities throughout the United States as well as the regional laboratories for educational research and development. The federal government wanted to monitor the manner in which the money was being used through an evaluation process. Generally the evaluations were carried out by a group of individuals appointed as an external review team. The review team typically spent several days conducting a site visit, examining the reports or products developed, and talking with staff members. Because of his increasing visibility as an evaluation theorist, Scriven was involved in many of these review teams (Popham, 1988).

During the site visits, Scriven detected an interesting phenomenon. The review always began with the team requesting information regarding the goals of the agency being reviewed. All other interactions between the review team members and the staff of the agency were influenced by the agency's stated goals. Scriven believed the quality of the evaluator's work might be affected by a preoccupation with these goals. For example, the team might overlook outcomes not stated in the goals. To address his concerns, Scriven developed a technique he described as goal-free evaluation (Popham, 1988).

Goal-free evaluation focuses on intended and unanticipated outcomes of a program. The evaluator does not request information regarding the goals of a program (Popham, 1988). The external goal-free evaluator has limited contact with the program staff (Worthen & Sanders, 1987). Instead the evaluator examines the components of the program and draws his own inferences. Once these inferences have been drawn, the evaluator devises measures to assess the program's effectiveness. Scriven recommended goal-free evaluation as a supplement to goal-oriented evaluation (Popham, 1988). He felt goal-free evaluation would reduce bias, increase objectivity, and increase the chances that unanticipated side effects would be considered (Worthen & Sanders, 1987). Scriven believed involving both goal-oriented and goal-free evaluations in a program evaluation strengthened the evaluation design (Popham, 1988).

Decision-Oriented Evaluation

Decision-oriented evaluation is so named because it is meant to serve decision makers. Its rationale is that administrators, policymakers, school boards, teachers, and other groups in education need evaluative information in order to make good decisions. The decision makers' concerns, needs, and input guide the direction of the evaluation study (Worthen & Sanders, 1987). The evaluator needs to begin the evaluation process by determining who the key decision makers are so that they can be consulted. A decision-oriented evaluation is a collaborative relationship that involves close interaction between the evaluator and the program staff (Stecher & Davis, 1987). The success of the evaluation depends on the quality of teamwork between evaluators and decision makers (Worthen & Sanders, 1987).

Stufflebeam and Alkin have made the most contributions to the decision-oriented evaluation approach. During the mid-1960s, they felt other evaluation approaches had shortcomings. Stufflebeam developed the CIPP model and Alkin developed a parallel model, the UCLA model. Stufflebeam's CIPP model was developed to assist administrators make better educational decisions. He defined evaluation as a cyclical process of assisting decision makers (Smith & Glass, 1987). He stated that in this model, the evaluator must understand the program cycle and be prepared to provide the appropriate kind of information at different points in the evaluation (Stecher & Davis, 1987). Stufflebeam believed administrators face four different kinds of decisions:

1) content evaluation, assists with planning decisions by defining objectives for a program; 2) input evaluation, assists with structuring decisions by determining resources, strategies, and procedures; 3) process evaluation, assists with implementing decisions regarding possible barriers, needed revisions, and procedural changes; and 4) product evaluation, assists with recycling decisions to determine program effectiveness (Worthen & Sanders, 1987).

Stufflebeam's model is best known by the acronym CIPP, which was formed from the first letter of each kind of evaluation--context, input, process, and product. Context evaluation is the most basic kind of evaluation. This type of evaluation leads to the establishment of the goals and objectives which focus the evaluation. Once the goals and objectives have been identified, the evaluator employs an input evaluation to determine the resources needed and the manner in which they will be used to meet the objectives. Process evaluation involves monitoring the program to help decision makers anticipate or overcome defects in the procedural design. Product evaluation is an ongoing process used to measure and interpret goal attainment (Popham, 1988). Stufflebeam believed that evaluators should focus the evaluation, collect data, organize the information collected, analyze this information, and report the findings to the decision makers. His model has been used in school districts as well as state and federal government agencies. One of the

Another decision-oriented evaluation model, which parallels Stufflebeam's model, was developed by Alkin while he was director of the Center for the Study of Evaluation at the University of California at Los Angeles. Referenced to as the UCLA model, it includes the following types of evaluation: 1) systems assessment, provides information about the state of the system (parallels context evaluation in the CIPP model); 2) program planning, assists with the selection of programs to meet the intended needs (parallels input evaluation in the CIPP model); 3) program implementation, provides information about whether a program was implemented in the manner intended and to the appropriate audience; 4) program improvement, provides information objective attainment including both intended and unanticipated objectives (parallels process evaluation in the CIPP model); and 5) program certification, provides information regarding the value of the program and its potential uses in other settings (parallels product evaluation in the CIPP model). Alkin and Stufflebeam's models appear to be linear and sequential; however, the developers stress this is not the case. For example, the evaluator would not have to complete an input evaluation in order to utilize other types of evaluation models (Worthen & Sanders, 1987).

Critics of the decision-oriented evaluation model believe it could be costly and complex to follow this model to its entirety. In addition, critics of this approach question whether the objectives identified at the beginning of the evaluation will remain stable during the evaluation process (Worthen &

Sanders, 1987). Another criticism expressed involves the fact that some decisions are made based on subjective observations, politics, intuition, or personal bias (Stecher & Davis, 1987). Advocates of the model believe it is a strong evaluation model for school administrators and boards because of its emphasis on providing information for decision makers (Worthen & Sanders, 1987).

Expertise-Oriented Evaluation

The expertise-oriented approach relies upon the professional expert to judge an educational program for its quality (Worthen & Sanders, 1987). One example of the expertise-oriented approach is Eisner's Connoisseurship Model. As with all expertise-oriented approaches, Eisner relies on the use of human judgment as the key data-gathering instrument (Popham, 1988). Drawing on his experience as an art educator, Eisner developed an approach rooted in the domain of art criticism. Just as the art critic appraises a piece of art, Eisner's approach relies on the human judge to appraise the quality of an educational program. His approach relies on two concepts including educational connoisseurship and educational criticism. Connoisseurs are able to appreciate subtle qualities of phenomena with more sophistication than the layman. Eisner believed that the expert will be attuned to more and will know exactly what to look for when observing a specific program. For example, an expert in science instruction would know exactly what to look for when

evaluating a science lesson. The evaluator as connoisseur studies the qualities of a single case. When these qualities are understood, a public declaration is made of the evaluator's understanding and judgment. The public declaration is a narrative description of the elements of the case and comparisons of that case with similar cases. The evaluator makes a judgment about the program based on a personal critical review (Smith & Glass, 1987).

The critical review is not a negative appraisal, but rather an educational process intended to enable educators to recognize qualities and characteristics that might otherwise have been unnoticed or unappreciated. The critical review includes a description, interpretation, and an evaluation of that which is observed by the expert (Popham, 1988). The educational connoisseur must be aware of the complexities of the educational program being evaluated. Because so much relies on the judgments made by the expert, the training, experience, and credentials of the evaluator are critical for the validity of the evaluation (Worthen & Sanders, 1987).

Eisner viewed this model as a qualitative, humanistic supplement to the more traditional evaluation models. Critics believe that the expert may not question the assumptions and practices of his peers as much as an external evaluator. Because the evaluator is drawn from the profession, critics believe the evaluator may provide two evaluation reports--an inside confidential report revealing flaws and a public report which has been edited. Critics contend that this type of reporting makes the public distrustful of the system. Two

additional criticisms regarding this approach include the problem of the judgments revealing personal biases of the evaluator and that perhaps the expert is a mere presumption. Eisner encouraged evaluations from several connoisseurs to provide a variety of perceptions as opposed to one single definitive judgment (Worthen & Sanders, 1987).

Participant-Oriented Evaluation

Beginning in 1967, several evaluation theorists began to question traditional evaluation approaches. Critics of the traditional evaluation approaches stated that many evaluations were conducted without site observations. They argued that the human element was missing from the traditional educational evaluation approaches. These concerns produced an evaluation model with a new orientation that stressed first-hand experience with educational activities and settings. Advocates of this approach believe that the participants in the educational endeavor should be involved in the evaluation. Evaluation theorists favoring this approach prefer the use of naturalistic inquiry methods (Worthen & Sanders, 1987).

One type of participant-oriented evaluation model is Stake's responsive evaluation. Robert Stake turned from traditional evaluation methods in the early 1970s to develop his responsive evaluation model. This model focuses on issues important to the stakeholders--persons involved in the program such as program staff, sponsors, taxpayers, students, parents, teachers, and

administrators (Popham, 1988). In essence, each individual who has an interest in the quality of a program is called a stakeholder. These stakeholders have different perspectives and values. Their values are worth considering in an open evaluation process, and the results of the evaluation should be shared with them (Sanders, 1992). In order to respond to the multiple stakeholders, the evaluator must interact continuously with the members of the various stakeholder groups to determine the information they desire and the manner in which they want it presented (Worthen & Sanders, 1987).

The participant-oriented evaluation approach relies on human observers and judges as the primary data-gathering instrument (Popham, 1988). Observations, records, and data are reviewed with stakeholders during the evaluation process to try to build models that reflect the insights of various groups. The responsive evaluator spends a great deal of time talking with stakeholders, observing program activities, discerning underlying purposes and concerns, and conceptualizing problems and issues from multiple perspectives. The evaluator must be empathetic, patient, and sensitive as he serves as a counselor by helping participants to clarify their needs. The evaluator must be trained in qualitative methods--observation, interview, and field work (Stecher & Davis, 1987). This labor intensive approach limits the number of cases that can be studied, therefore, the cases must be carefully selected (Worthen & Sanders, 1987). The final evaluation is presented in several ways such as

through case studies, videotapes, or artifacts, rather than merely a formal written report (Stecher & Davis, 1987).

Critics of the responsive-oriented evaluation approach believe that it is impossible to take into account the multiple perspectives of all of the stakeholders (Stecher & Davis, 1987). They believe that an approach which stresses complexity rather than simplicity may be more popular with the developers than practitioners. There is debate regarding the credibility of the evaluation results due to the reliance on human observation and individual perspectives. Critics contend that this approach can be too time consuming because of the labor intensive aspects as well as the data analysis process required when field notes are involved (Worthen & Sanders, 1987). Advocates believe that the strength of the responsive-oriented approach lies in its sensitivity to multiple points of view (Stecher & Davis, 1987).

Single-Case Studies

Program evaluations have been the stimulus for much research, including many single-case study projects (Lancy, 1993). A single-case study is selected because it serves a particular evaluation purpose. Evaluating a single case is useful where one needs to understand some particular problem in great depth, where one can learn a great deal from an outstanding example of the phenomenon. For example, a great deal can be learned about how to improve a program by studying in-depth a select school that is implementing

the program. A case can be a person, an event, a program, a school, or a community (Cohen & Manion, 1980). Regardless of the unit of analysis, a case study seeks to describe that unit in depth, in detail, and in context (Patton, 1987). Some examples of successful single case studies include Anatomy of an Educational Innovation: Kensington School (Smith & Keith, 1971); Implementing Organization Innovations: A Sociological Analysis of Planned Educational Change (Gross, Giacquinta, & Berstein, 1971); The Man in the Principal's Office (Wolcott, 1973); Toward a Clear Picture of Thinkabout: An Account of Classroom Use (Hart-Landsberg, 1982); God's Choice: The Total World of a Fundamentalist Christian School (Peshkin, 1986); and A Beginning Teacher's Experience: Reflections on Becoming a Teacher (Knowles, 1990).

Critics of single-case studies argue that it is difficult to generalize such studies; that is, another researcher might come to a differing conclusion. Eisner (1991) believed that single-case studies are full of opportunities for generalization. While the researcher can generalize, it is more likely that the readers will determine whether the research findings fit the situation in which they work. Eisner stated,

Every case is a case about something. If we learn something about a case that we did not know at the outset of the study, not only have we achieved consciousness of that quality or feature, but also we learn to look for that quality or feature in other places (Eisner, 1991, p. 207).

Extreme-Case Selection

Choice of participant selection in educational evaluation depends on the goals and questions formulated by the researcher. One type of participant selection is extreme-case selection. Extreme-case selection involves several steps. First, it involves the identification of the norm for some characteristic of interest to the researcher, for example, academic achievement. Second, the extremes of that characteristic are defined, for example, high achieving students on one end of a continuum and low achieving students on the other end. Finally, the extremes of the continuum become the focus of the study, for example, a case study of a school with low achieving students (LeCompte & Preissle, 1993).

When examining extreme-cases, caution should be taken with regard to interpreting statistical data. Extreme-cases, known as outliers, fall on the extreme ends of a continuum. When experimental groups are selected on the basis of extreme scores, statistical regression may produce an effect that could be mistakenly interpreted as an experimental effect. This statistical regression refers to the tendency for extreme scores to regress or move toward the population mean on subsequent tests. For example, if students are selected for remedial research based on the fact that they scored in the bottom quarter on an achievement test, the mean of this group will tend to move toward the mean of the population on a second test whether or not an experimental treatment is applied. Ary, Jacobs, and Razaveih (1990), referred to the old

adage, "When you are at the bottom, you have nowhere to go but up" and "When you are at the top, you have nowhere to go but down." Failure to control for statistical regression is a threat to internal validity and presents a problem in interpreting outcome data (Popham, 1988; Ary, Jacobs, & Razaveih, 1990; Wolf, 1990).

Summary

Educational evaluation can provide reliable information about the performance of educational products, practices, and programs. This information can provide teachers and school administrators with indications about how well they are doing. Also, this information can be used to inform parents about the curricula and teaching methods used to instruct their children. Additionally, the information gained from educational evaluation can be used to inform citizen groups about the results that is being achieved through schools' expenditures of public funds. Because educational evaluation can help provide this information, it has gained widespread acceptance in education. Although terms such as measurement, testing, and assessment are often used to describe evaluation, the activity that is most often mistaken for evaluation is research. Evaluation and research are often confused because there are many similarities between the two activities. They both 1) use measurement devices, 2) analyze their data systematically, 3) describe their endeavors in formal reports, and 4) rely on a technical set of tools. The major

distinction between evaluation and research is the generalizability of the phenomena being studied. Although generalizations can be made from evaluation, it is extremely difficult due to the diversity of purpose. Evaluation is oriented to provide feedback leading to a successful outcome. Research, on the other hand, is oriented toward the development of theories in which hypotheses are derived, put to a test under controlled conditions and generalizations are made. One type of educational evaluation, program evaluation, is used frequently by educators. Program evaluations can help to set priorities, guide the allocations of resources, facilitate the modification and refinement of programs, and indicate the need for personnel and resources. Program evaluation can play an integral role in improving program operations.

CHAPTER 3

Program Dimensions

Evaluating a program to determine whether it meets its stated goals requires a basic knowledge of the program and the goals of that program. Hence, this evaluation was conducted on the Jacox Elementary School Improvement program. This chapter describes Jacox Elementary School, the Jacox Elementary School Improvement program, operationalization of the goals, evaluation design, the subjects, instrumentation, data collection procedures, and data analysis.

Jacox Elementary School

Jacox Elementary School opened in 1949 as a junior high school and became an elementary school in 1980. The school is located in the southeast region of the city of Norfolk, Virginia. It is well-maintained and upgrades were added periodically, for example, air-conditioning was added during the summer of 1992. During the 1992-93 academic year, the school drew its students from three lower socioeconomic, predominantly minority neighboring communities. A federally funded housing project made up at least half of the Jacox Elementary School student population. The racial composition of the student population was 99 percent African American, with a total of 677 students. Boys outnumbered girls 60 to 40 percent. For the academic year 1992-93,

97 percent of the students received free or reduced breakfast and lunches. Of the families, 58.7 percent received Aid for Dependent Children. Jacox Elementary School had a 75.08 percent stability rate, this meant that 75.08 percent of the students who enrolled in kindergarten left fifth grade. During the academic year 1992-93, the school had a schoolwide Chapter 1 program. The total student population qualified for some Chapter 1 services (Norfolk Public Schools; Department of Research, Testing, & Statistics, 1992).

The following programs were included in the school population during the academic year 1992-93: Schoolwide Chapter 1, three full-day prekindergarten classes, 27 classes in kindergarten through Grade 5, and three self-contained special education classes. Additional full-time professional personnel included a principal, an assistant principal, an instructional specialist, a guidance counselor (plus one-half guidance counselor), a media specialist, a health/physical education teacher, a communication skills specialist (coordinated the reading/language arts program for the school), three Chapter 1 schoolwide teachers (used to reduce class size), two Chapter 1 co-teachers (floated at Grades 3 and 5), and a speech therapist. Along with the two building administrators, there were 44 full-time faculty members (Norfolk Public Schools; Department of Special Projects, 1992).

Description of the Program

The number and kinds of interventions a school or school district includes in improvement programs varies from school to school and district to district. Some schools or districts center their improvement plans on a single intervention strategy. The vast majority of schools or districts include a combination of strategies in their improvement plans. The philosophy behind the multiple intervention approach is the recognition that no single strategy is likely to solve the diversity of problems that schools typically encounter (Guskey, 1990, pp. 11-12).

During the 1992-93 academic year, the Jacox Elementary School Improvement program was a multiple intervention school improvement program designed to 1) improve student academic achievement, 2) positively influence the self-concept of students, and 3) improve the school climate. A full description of the program is included in Appendix B. The following represents an overview of the program.

Curriculum and Instruction

The Jacox teachers were expected to implement a whole language, literature-based, integrated curriculum. Teachers developed theme-based, and integrated units using trade books and children's literature and created lessons relevant to the lives of the children in their classrooms. One or two thematic units were covered during each quarter. Each grade level focused on different themes to avoid repetition and duplication. Teachers sought input from the students to determine which themes to use in order to increase student motivation and interest. Standardized curriculum guides were used to focus

the learning objectives. Resource teachers provided support by offering suggestions, recommending materials, and demonstrating instructional strategies.

The activities in the thematic units included opportunities for students to read a variety of trade books; write about personal experiences related to their reading; connect reading, writing, listening, and speaking; work cooperatively with classmates; and maintain a portfolio which was used for ongoing self-evaluation. Teachers incorporated developmentally appropriate practices. Such practices included offering students choices and the opportunity to actively participate in the learning process with appropriate materials and equipment.

Teachers served as facilitators by asking questions, making suggestions, and adding more complex materials or ideas to a learning situation. Teachers listened, observed, and interpreted students' learning. Teachers used this information to monitor and adjust the instructional program. As a facilitator, the teacher monitored students as they worked in cooperative groups. A variety of manipulatives were available for student use. Discussion and peer tutoring were an ongoing part of the instructional program.

Planning

Teachers were given release time each quarter for a whole day of team planning. Grade level teams met to collaboratively prepare thematic units.

Certain resource teachers assisted with team planning (communication skills specialist, instructional specialist, and media specialist). Each team decided how to approach the planning process so that each member contributed. Final copies of the thematic units were submitted to the principal for review. Each teacher was held accountable for daily planning. The daily plans reflected the thematic units of study.

Staff Development

The Jacox Elementary School Chapter 1 budget for 1992-93 allocated \$2,200 for staff development. This money was spent to send teachers to professional development activities. For example, a week prior to the date that all Norfolk Public Schools teachers returned to work in August 1992, the Jacox teachers attended four half-day workshops focusing on topics such as 1) Sensitivity to the Urban Learner, 2) Developmentally Appropriate Practices and Strategies, 3) Thematic Unit Planning, and 4) Classroom Management. The classroom management topic was expanded and offered to the teachers through Norfolk Public Schools human resources and staff development office as a course for credit. The remaining staff development funds were used to send teachers to one-day workshops in the Tidewater area or as far away as Richmond (VA). Grade-level teams decided who would attend the workshops. Additionally, internal staff development opportunities were offered. Every Friday was reserved for grade level meetings for teachers to share ideas.

Classroom Management

The Jacox teachers had a systematic classroom management plan (for example, assertive discipline). Close communication was maintained with parents. Such communication included phone calls, notes home, home visits, and conferences. The administration supported the efforts of teachers to maintain orderly classrooms. Referrals to the office resulted in one of several actions: a lecture, a note home, a phone call home, a home visit, in-school suspension, or suspension from school. A follow-up meeting between the teacher and the administration was held that same day. Students with ongoing behavior problems were referred to the Students Services Team for review.

Program Goal Selection

In selecting the goals for the evaluation of the Jacox Elementary School Improvement program, the evaluator met with the principal of Jacox Elementary School and the assistant superintendent for elementary schools to discuss the program's goals. During these meetings, the three areas to be examined were determined including 1) student academic achievement, 2) the self-concept of students, and 3) the school climate as perceived by students and teachers. The goals for each of these areas were selected based on several factors including 1) the availability of data, 2) the impact on the instructional time, and 3) the benefits to the school's instructional program. Whenever possible, the goals were taken from the Jacox Biennial School

Improvement Plan for 1991-93; a school improvement plan developed by the faculty of the school. The evaluator selected the goals not taken from the Jacox Biennial School Improvement Plan for 1991-93 based on the criteria previously mentioned.

Program Goals

1. To improve student academic achievement.
 - By March 1993, there will be a statistically significant increase (.05 level) in the average composite Iowa Tests of Basic Skills scores for Grades 2 through 4 as evidenced by a comparison with baseline data from 1989-90, 1990-91, and 1991-92.
 - By June 1993, there will be a 5 percent* increase in the number of students in Grades 3 through 5 passing the communication skills and math portions of the divisionwide criterion-referenced tests as evidenced by a comparison with baseline data from 1991-92.

(* Student outcome goal obtained from The Jacox Biennial School Improvement Plan 1991-93.)
 - By June 1993, there will be a statistically significant difference (.05 level) in the mean level of achievement in final report grades in communication skills and mathematics for fourth graders as

evidenced by a comparison with baseline data from 1990-91 and 1991-92 on the same cohort group.

- By April 1993, there will be a statistically significant difference (.05 level) in the number of fourth grade students passing the reading comprehension portion of the Virginia State Literacy Predictor Tests as evidenced by a comparison with baseline data from 1989-90, 1990-91, and 1991-92.

2. To improve the self-concept of students.

- By May 1993, fourth and fifth grade students who participated in self-concept small group counseling will score above the bottom three stanines of the Piers-Harris Children's Self-Concept Scale as evidenced by posttest data.
- By June 1993, there will be a statistically significant difference in the means of the pretest and posttest for fourth and fifth graders on the Piers-Harris Children's Self-Concept Scale.

3. To improve the school climate as perceived by students and teachers.

- By June 1993, a minimum of 80 percent* of the Jacox students in kindergarten through Grade 5 will perceive that the school climate promotes a positive, safe, friendly, and nurturing climate as evidenced by the scores on the Student Survey for Jacox Elementary's Climate Correlate.

(* Outcome goal obtained from the Jacox Biennial School Improvement Plan 1991-93.)

- By June 1993, there will be a statistically significant increase (.05 level) in the mean on the Student Survey for Jacox Elementary's Climate Correlate 1992-93 survey scores as evidenced by a comparison with 1991-92 data.
- By June 1993, average daily student attendance should meet or exceed 94 percent* as evidenced by attendance reports.
(* Outcome goal obtained from the Jacox Biennial School Improvement Plan 1991-93.)
- By June 1993, the Jacox faculty will perceive that the school climate promotes a positive, safe, friendly, and nurturing climate as evidenced by a comparison of the Jacox faculty scores on the National Association of Secondary School Principals Teachers School Climate Survey with national scores.
- By June 1993, average daily teacher attendance should meet or exceed 94 percent as evidenced by attendance reports.

Evaluation Design

The goal of this study was to evaluate the Jacox Elementary School Improvement program in the Norfolk Public School Division. One of the major purposes of evaluating a program is to help the decision maker determine if

the improvement program that he has chosen is effectively achieving the goals or objectives of the program (Popham, 1988). To make that determination, an evaluation has to be conducted, and convincing evidence of the program's success must be presented. In order to present evidence of success for the Jacox Elementary School Improvement program, a descriptive research design was employed. Descriptive research studies are designed to obtain information concerning the status of a program during the time of the study. The aim of descriptive research is to describe what is with respect to conditions in the program. The information gained from the research study is used to assist in decision making. Generally, the steps involved in a descriptive research study include stating the problem; identifying the information needed to solve the problem; selecting the instruments needed to collect data; determining the sample; designing the procedures for data gathering; gathering the data; analyzing the data; and preparing the final report (Ary, Jacobs, & Razavieh, 1990). A summary of the subjects and instrumentation is provided in Figure 2.

Subjects

Student Academic Achievement

Iowa Tests of Basic Skills

All second, third, and fourth graders present at Jacox Elementary School during the 1992-93 standardized testing were included in the study. This

Student Academic Achievement

1) **Iowa Tests of Basic Skills**

Grade 2, N = 64

Grade 3, N = 86

Grade 4, N = 96

2) **Criterion-Referenced Tests**

Communication Skills

Grade 3, N = 85

Grade 4, N = 97

Grade 5, N = 94

Mathematics

Grade 3, N = 100

Grade 4, N = 103

Grade 5, N = 90

3) **Final Report Card Grades**

Grade 4, N = 53

4) **Degrees of Reading Power**

Grade 4, N = 96 (Cohort group since Grade 2)

Self-Concept of Students

Piers-Harris Children's Self-Concept Scale

Grades 4 and 5, N = 171

School Climate

1) **Student Survey for Jacox's Climate Correlate**

Grades Kindergarten - 5, 1991-92, N = 502

1992-93, N = 534

2) **Student Attendance Records**

All students enrolled at Jacox, 1992-93, N = 677

3) **NASSP School Climate Survey for Teachers**

N = 47

4) **Teacher Attendance Records**

N = 49

5) **Teacher Interviews**

N = 19

Figure 2. Summary of Subjects and Instrumentation

represented two hundred forty-six students. Of the two hundred forty-six students, sixty-four were second graders, eighty-six were third graders, and ninety-six were fourth graders.

Divisionwide Criterion-Referenced Tests

All third, fourth, and fifth graders present at Jacox Elementary School during the 1992-93 divisionwide criterion-referenced testing were included in the study. Those students taking the communication skills portion of the tests included eighty-five third graders, ninety-seven fourth graders, and ninety-four fifth graders. Included in the mathematics portion of the testing were one hundred third graders, one hundred three fourth graders, and ninety fifth graders.

Final Report Card Grades

All fourth graders enrolled at Jacox Elementary School since second grade were included in the study. This represented fifty-three students.

Virginia State Literacy Passport Tests, Degrees of Reading Power Test

All fourth graders present at Jacox Elementary School during the 1992-93 administration of the reading comprehension portion of the Virginia State Literacy Predictor Tests were included in the study. This represented ninety-six students.

Self-Concept of Students

Piers-Harris Children's Self-Concept Scale

Fourth and fifth graders present at Jacox Elementary School during the 1992-93 administration of the Piers-Harris Children's Self-Concept Scale pretest and posttest were included in the study. This represented one hundred seventy-one students.

Small Group Counseling Sessions

Fourth and fifth graders who participated in small group counseling sessions during the 1992-93 school year were included in the study. This represented twenty-one students; however, only eighteen were present for the posttest.

Average Daily Student Attendance

All students enrolled at Jacox Elementary School who were included in the average daily student attendance count for the 1992-93 school year were included in the study. This represented six hundred seventy-seven students.

School Climate

Student Survey for Jacox's Climate Correlate

Students in Grades kindergarten through fifth who took the 1991-92 and 1992-93 student school climate surveys were included in the study. For the

1991-92 school year, this represented 502 students. Of the 502 students, ninety-nine were kindergartners, sixty-four were first graders, eighty-three were second graders, eighty were third graders, one hundred were fourth graders, and seventy-two were fifth graders. For the 1992-93 school year, this represented 534 students. Of the 534 students, one hundred six were kindergartners, eighty-eight were first graders, eighty-three were second graders, eighty were third graders, ninety-three were fourth graders, and eighty-four were fifth graders.

Average Daily Student Attendance

All students included in the average daily student attendance count for 1992-93 were included in the study. This represented six hundred seventy-seven students.

NASSP Teacher School Climate Survey

All full-time professional staff members who completed the school climate survey for teachers in May 1993 were included in the study. This represented forty-seven teachers.

Average Daily Teacher Attendance

All Jacox staff members under teacher contracts who were included in the 1992-93 average daily teacher attendance count were included in the study. This represented forty-nine teachers.

Teacher Interviews

Two teachers per grade level and five resource teachers participated in one-on-one interviews during May and June 1993. This represented nineteen teachers.

Instrumentation

Student Academic Achievement

Several instruments were used to measure student academic achievement including the Iowa Tests of Basic Skills, the divisionwide criterion-referenced tests, and the reading comprehension portion of the Virginia State Literacy Predictor Tests as well as final report card grades in communication skills and mathematics.

Iowa Tests of Basic Skills

The Iowa Tests of Basic Skills is a standardized measurement instrument designed to provide information which can be used in improving instruction. The tests are published by the Riverside Publishing Company and

have been approved by the Virginia Department of Education as the state-wide measure of student performance. Levels of the test were designed to correlate roughly to chronological age. During the 1992-93 school year, Level 8, Form H was administered to the Jacox Elementary School's second graders. The average composite score included the overall performance of a student in the following areas 1) listening, 2) word analysis, 3) vocabulary, 4) reading comprehension, 5) language skills, 6) work-study skills, and 7) mathematics skills. This complete battery consisted of thirteen tests covering the important skill objectives of the primary instructional program. Nine of the thirteen tests were orally administered in order to minimize the effects of reading mechanics on skills that were relatively independent of reading. Level 8 represented an average achievement level in Grades 2.7 to 3.5. Instructions indicated that all but the slowest students should be allowed to finish each section of the tests and approximate testing times were given in the instruction manual (Hieronymus & Hoover, 1986).

During the 1992-93 school year, Level 9, Form H was administered to the Jacox Elementary School's third graders. Level 10, Form G was administered to the fourth graders. Level 9 and Level 10 tests included vocabulary, reading comprehension, language, work-study, and mathematics. The average achievement level for Level 9 was Grade 3 and for Level 10 was Grade 4. Each section of the test was timed. For all elementary students taking the Iowa Tests of Basic Skills, responses were marked by the pupils in

pecially printed MRC machine-scorable booklets, which were sent to Riverside Scoring Services for scoring and the preparation of reports (Hieronymus & Hoover, 1986).

The Iowa Tests of Basic Skills were designed and constructed by the professional staff of the Colleges of Education at the University of Iowa. The validity of the tests' content was determined through review of current instructional materials, recommendations from authorities in the field, continuous interaction with test users, studies of the frequency of need for the vocabulary tested, studies of frequency of error, studies to determine the importance of the content included, reviews by professionals from diverse cultural groups, studies to detect possible item bias, and review of the characteristics of items relating to content validity (Hieronymus & Hoover, 1986).

With regard to the reliability of the test scores, the following represented a reasonable estimate of the amounts by which the abilities of students in a particular reference group may have been mismeasured. For about two-thirds of the students, the test scores they obtained were correct within one standard error value; for 95 percent the scores were in error by less than two standard errors; for more than 99 percent, the scores were in error by less than three standard error values. The use of Kuder-Richardson Formula 20 was used to estimate reliability. Reliability coefficients were derived based on data from the entire national sample. For second grade using Level 8, Form H, the following

represented the reliability coefficient for each test administered 1) listening, .691; 2) word analysis, .865; 3) vocabulary, .888; 4) reading, .917; 5) spelling, .806; 6) capitalization, .844; 7) punctuation, .708; 8) usage & expression, .830; 9) visual materials, .746; 10) references, .805; 11) mathematics concepts, .824; 12) mathematics word problems, .797; and 13) mathematics computations, .789. For third grade using Level 9, Form H, the following represented the reliability coefficient for each test administered 1) listening, .878; 2) reading, .918; 3) spelling, .858; 4) capitalization, .847; 5) punctuation, .877; 6) usage & expression, .835; 7) visual materials, .913; 8) references, .908; 9) mathematics concepts, .813; 10) mathematics word problems, .858; and 11) mathematics computations, .895. For fourth grade using Level 10, Form G, the following represented the reliability coefficient for each test administered 1) vocabulary, .890; 2) reading, .923; 3) spelling, .891; 4) capitalization, .838; 5) punctuation, .866; 6) usage & expression, .899; 7) visual materials, .864; 8) references, .897; 9) mathematics concepts, .854; 10) mathematics word problems, .890; and 11) mathematics computations, .907 (Hieronymus & Hoover, 1986).

Criterion-Referenced Tests

The divisionwide criterion-referenced tests in communication skills and mathematics were developed to assess whether students had mastered the objectives stated in the standardized curriculum guides. Both sets of tests

were developed by local curriculum specialists and classroom teachers. The validity of each test was determined by experts in the field. The use of Kuder-Richardson Formula 20 and odd-even comparisons were used to estimate the reliability of each test. The Grade 3 communication skills criterion-referenced test administered in June 1993 had a standard error of 3.01, a Kuder-Richardson Formula 20 reliability coefficient of .94 and an odd-even comparison reliability coefficient of .94. The Grade 4 communication skills criterion-referenced test administered in June 1993 had a Kuder-Richardson Formula 20 reliability coefficient of .93 and an odd-even comparison reliability coefficient of .93. The Grade 5 communication skills criterion-referenced test administered in June 1993 had a Kuder-Richardson Formula 20 reliability coefficient of .90 and an odd-even reliability coefficient of .91 (Norfolk Public Schools; Department of Research, Testing, & Statistics, 1993).

Each communication skills test was untimed, had 60 items, and tested three items per objective. At Grades 3, 4, and 5, such objectives as fact and opinion, synonyms, antonyms, multiple meaning, cause and effect, details, main ideas, and character traits were tested. The tests were arranged in a multiple choice format with four response choices for each item. Students used a separate answer sheet to record their responses. The answer sheets were machine scored by the Norfolk Public Schools department of research, testing, and statistics. Cut-off scores were used to determine the extent to

which each student reached mastery of the objectives tested. Reports were sent to the building principals to be distributed to classroom teachers (Norfolk Public Schools; Department of Research, Testing, and Statistics, 1993).

The use of Kuder-Richardson Formula 20 and odd-even comparisons were also used to estimate the reliability of the mathematics criterion-referenced tests. The Grade 3 mathematics criterion-referenced test administered in June 1993 had a Kuder-Richardson Formula 20 reliability coefficient of .90 and an odd-even comparison reliability coefficient of .91. The Grade 4 mathematics criterion-referenced test administered in June 1993 had a Kuder-Richardson Formula 20 reliability coefficient of .91 and an odd-even comparison reliability coefficient of .92. The Grade 5 mathematics criterion-referenced test administered in June 1993 had a Kuder-Richardson Formula 20 reliability coefficient of .93 and an odd-even comparison reliability coefficient of .94 (Norfolk Public Schools; Department of Research, Testing, & Statistics, 1993).

The third and fourth grade mathematics criterion-referenced tests had 50 items. The objectives tested included place value, order, computation, graphing, spatial relations, measurement, rational numbers, money, and problem solving. There also was an observation section on each test. The number of items used to test each objective varied. For example, on the third grade test, 8 items assessed place value while only 2 items assessed graphing. On the fourth grade test, 3 items assessed place value and 3 items

assessed graphing. The fifth grade criterion-referenced test assessed place value, order, computation, graphing, measurement, rational numbers, fractions and decimals, and problem solving. In keeping with the third and fourth grade tests, there also was an observation section on the fifth grade test. The fifth grade test included a timed section on multiplication and division. Students marked their answers on a separate answer sheet. The test format for all grade levels was multiple choice with four response choices. The observation section was marked by the classroom teacher. Cut-off scores were used to determine the extent to which each student reached mastery of the objectives tested. Reports were sent to the building principals to be distributed to classroom teachers (Norfolk Public Schools; Department of Research, Testing, & Statistics, 1993).

Degrees of Reading Power

The Virginia Department of Education required that all sixth graders attending school in the state of Virginia take the Degrees of Reading Power as one portion of the Virginia State Literacy Passport Tests. Fourth graders who attended the Norfolk Public Schools in 1992-93 took the Degrees of Reading Power as a predictor test. Remedial services in reading comprehension were provided in fourth and fifth grades for students scoring poorly on the predictor test.

The Degrees of Reading Power was a test of reading used to measure reading comprehension. The test measured a student's ability to process and understand prose passages written at increasing levels of difficulty. The fourth grade predictor test contained a series of eight passages with each passage containing approximately 325 words. The selections were nonfiction and nontechnical prose. Each passage contained seven test items. The items were created by deleting seven words from the passage. In a multiple choice format, students selected from five word choices the word that best completed the sentence. There was a deleted word about every 2 to 7 sentences. The test had no time limit (The College Board, 1986).

The validity of the Degrees of Reading Power tests as a measure of reading comprehension was reported in the technical report in the areas of construct validity, content validity, criterion-related validity, and convergent validity. In accord with requirements of construct validity, research has shown that the Degrees of Reading Power tests engaged only those cognitive processes used to construct meaning as one reads. The correlation between the readability of passages and the average difficulty of the items embedded in them was $r=.95$. In addition, The Degrees of Reading Power tests had construct validity because test results were in accord with the expectations of experts in reading instruction. This means that low-ability students usually got only the easiest items correct, middle-ability students usually got only the easy and moderately difficult items correct, and the high-ability students got all but

the most difficult items correct, therefore, it is possible to forecast, from the Degrees of Reading Power test results, how well students can comprehend text at different levels of readability (The College Board, 1986).

To control for content bias, topics for the Degrees of Reading Power test passages were selected at random from the universe of all prose subject matter. When a criterion measure was used to test for criterion-validity, the Degrees of Reading Power tests correlated highly ($r=.90$) with the measure. As evidence of convergent validity, the Degrees of Reading Power tests correlated fairly highly with such tests as the California Achievement Test with a range from $r=.77$ to $.85$ (The College Board, 1986).

The Kuder-Richardson Formula 20 was used to estimate the reliability of the Degrees of Reading Power Tests. Since the reliability coefficients were high ($r=.94$ to $.96$), the Degrees of Reading Power test forms were homogeneous and had a high degree of internal consistency. Alternate-form reliability coefficients all equaled $r=.95$ (The College Board, 1986).

All Degrees of Reading Power passages were reviewed by panels of educators who were competent in detecting biased test items. An attempt was made to isolate any individual test item that might have been biased for high- or low-ability students; African-Americans, Hispanics, or Caucasians; males or females; or high or low socioeconomic groups. Test bias was evaluated by determining the adequacy of the Degree of Reading Power test scores in describing the reading ability of students in various population subgroups.

Analysis of variance research was conducted to address the question of test bias. The technical report indicated that while main effects were significant, no significant ability by sex interaction was found, no significant interactions involving ability and race were found, and no significant ability by socioeconomic group interaction was found (The College Board, 1986).

Self-Concept of Students

Piers-Harris Children's Self-Concept Scale

The Piers-Harris Children's Self-Concept Scale was used to measure the self-concept of students. Elementary school guidance counselors in the Norfolk school division use this instrument annually to assess student self-concept. The scale was an 80-item, self-report questionnaire designed to assess how children and adolescents feel about themselves. The scale may be administered either individually or in groups. Children were shown statements that tell how some people feel about themselves, and were asked to indicate whether each statement applied to them using yes or no responses. The scale provided six cluster scales including behavior, intellectual and school status, physical appearance and attributes, anxiety, popularity, and happiness and satisfaction. All cluster scales were scored in the direction of positive self-concept so that a high score on a particular cluster scale indicated a high level of assessed self-concept with that specific dimension (Piers, 1984).

Estimates of the content, criterion-related, and construct validity have been obtained from a number of empirical studies. These studies have used a variety of approaches including item analysis, intercorrelations among the scales and items, comparisons of the responses of various criterion groups, and comparison with other scales designed to measure similar constructs. Correlations between the Piers-Harris total score and the behavioral ratings by teachers and peers ranged from $r = -.03$ to $.64$, depending on the study. Correlations between the Piers-Harris total score and other measures of self-concept ranged from $r = .32$ to $.85$, depending on the study. Correlations across criterion groups ranged from $r = .32$ to $.60$. The intercorrelations among the six cluster scales and the total score ranged from $r = .21$ to $.59$, indicating a moderate degree of interrelatedness among scales.

To investigate convergent validity and discriminate validity, the Piers-Harris Children's Self-Concept Scale was compared with similar instruments. Convergent validity was examined by comparing performance on the Piers-Harris and the Self-Esteem Inventory (Coopersmith, 1967). A correlation coefficient of $.78$ was found, providing evidence of convergent validity. In 1982 Shavelson and Bolus examined discriminate validity by comparing the Piers-Harris with the Tennessee Self-Concept Scale (Fitts, 1965).

A comparison of the correlation between the two measures of general self-concept with the correlations between measures of different constructs

such as self-concept of ability was made. The average convergent validity coefficient of .77 was used to compare general self-concept with measures of different constructs. The resulting coefficients ranged from -.02 to .38. According to Piers (1984), these results support discriminate validity for the construct of general self-concept.

The Piers-Harris technical report indicated that the test appeared to be a highly reliable instrument. Test-retest reliability coefficients ranged from .42 to .96 and internal consistency estimates for the total score ranged from .88 to .93. In addition, the reliability figures compared favorably with other measures used to assess personality traits in children and adolescents (Piers, 1984).

School Climate

Student Survey for Jacox's Climate Correlation

The student school climate survey was developed by a committee of teachers from Jacox Elementary School. The instrument had been used for several school years. This 27-item student attitude survey was designed to measure the perceptions of the students regarding the school climate of Jacox Elementary School. Statements on the survey related to teacher-student relationships, security, maintenance, student behavioral values, student-peer relationships, discipline, and quality of the school. Three items (items 11, 12, and 16) were negatively stated. Students were asked to indicate a level of agreement with each item by choosing from a set of responses. The response

alternatives differed according to grade level. Students in Grades kindergarten through second indicated agreement by the choice of a smiling face, indicated disagreement by the choice of a sad face, and indicated uncertainty by the choice of a straight face. The items were read aloud to the primary students. The survey was untimed. Students in Grades kindergarten through second marked their answers directly on the survey.

For Grades 3 through 5, the responses were for agree strongly, agree, uncertain, disagree, or disagree strongly. A Likert scale with 1 representing disagree strongly and 5 representing agree strongly was used. Students in Grades 3 through 5 marked their answers on separate answer sheets. Norfolk Public Schools department of research, testing, and statistics coordinated the scoring process and preparation of the report for the Jacox Elementary Schools' principal and staff. Since this was a survey developed by teachers at one particular elementary school and administered to only students attending that school, the reliability and validity of the survey had not been estimated.

NASSP Teacher School Climate Survey

To measure the school climate as perceived by teachers, the National Association of Secondary School Principals Teacher School Climate Survey was used. This instrument was used because national survey norms were given which could be used as a comparison against local survey results. The survey was developed at the University of Nebraska-Lincoln. An item bank

was created for the development of the instrument. This item bank was generated from a comprehensive review of both climate and effective schools literature and an analysis of existing climate instruments used by both researchers and practitioners. After the initial pilot tests, two forms of the instrument were further defined in a national pilot study. A second national study was conducted to collect normative data for the final version of the instrument. The 55-item survey was arranged on a Likert scale from 1, strongly disagree; 2, disagree; 3, neither agree nor disagree; 4, agree; 5, strongly agree; to 6, don't know. Teachers responded on a separate answer sheet which was hand scored (NASSP Examiner's Manual, 1987).

The NASSP School Climate Survey collected data about perceptions on 10 subscales including teacher-student relationships, security and maintenance, administration, student academic orientation, student behavioral values, guidance, student-peer relationships, parent and community-school relationships, instructional management, and student activities. The climate instrument was developed by task force members after an extensive review of the literature. The task force acted as an expert panel in the development and selection of instrument items. The climate items were field tested and subjected to factor analysis. Redundant and ambiguous items were revised or excluded. Both empirical data from the field studies and rational considerations guided the formulation of subsequent drafts of the instrument. During the development of the instrument, the task force placed emphasis on

scale and item conceptualization in order to support strong construct validity. Extensive use of exploratory and confirmatory factor analysis in field testing the instruments ensured that only concepts and items with strong factor loadings were retained. Task force review and factor analyses both supported strong construct validity for the climate instrument. Regarding reliability, the average internal consistency reliability of the climate subscale was .81, with a range from .67 to .92 (NASSP Examiner's Manual, 1987).

Teacher Interviews

Nineteen teachers were interviewed using open-ended questions. The questions were developed by the evaluator with input from an expert panel. All of the interviews were audio taped. The interviews were conducted before school; after school; and, in some rare cases, during a lunch period. Each interview lasted between thirty and sixty minutes. The same questions were asked of each teacher interviewed; however, additional questions were asked when deemed appropriate by the evaluator.

Data Collection Procedures

Student Academic Achievement

The Iowa Tests of Basic Skills were administered between March 22 and April 2, 1993. Test results were available in August 1993. Baseline data were available for 1989-90, 1990-91, and 1991-92. The criterion-referenced

tests for communication skills and mathematics were administered from June 1 to June 4, 1993. Test results were available in August 1993. Baseline data were available for 1991-92. Final report card grades for communication skills and mathematics were available by June 11, 1993. Baseline data were available for 1990-91 and 1991-92 on the same cohort group. The reading comprehension portion of the Virginia State Literacy Predictor Tests was administered between April 26 and April 30, 1993. Test results were available by August 1993. Baseline data were available for 1989-90, 1990-91, and 1991-92.

Self-Concept of Students

The Piers-Harris Children's Self-Concept Scale pretest was administered October 16, 1992. The posttest was given May 14, 1993. The pretest and posttest results were available by September 1993.

School Climate

The Student Survey for Jacox's Climate Correlate was given in May 1992. These data were used as a baseline to compare with the survey administered in May 1993. The survey results for 1991-92 and 1992-93 were available by September 1993. Average daily student attendance was measured from September 1992 until June 1993. The average daily student attendance for the 1992-93 school year was available by August 1993. The

National Association of Secondary School Principals Teacher School Climate Survey was administered in May 1993. The results of the survey were available by August 1993. Average daily teacher attendance was measured from August 1992 until June 1993. The average daily student attendance for the 1992-93 school year was available by August 1993.

Data Analysis

Statistical analyses of the data were conducted to answer the following major research question and three subquestions:

Major Question

Is the Jacox Elementary School Improvement Program Effective in Achieving its Stated Goals?

Subquestions

Did the students improve academically?

Was the self-concept of students improved?

Was the school climate as perceived by students and teachers positively changed?

Student Academic Achievement

Using a One-Way Analysis of Variance (ANOVA), baseline data from 1989-90, 1990-91, and 1991-92 were compared with 1992-93 data for each grade level, second through fourth, to determine if there were significant differences at the .05 level in the average composite scores of the Iowa Tests of Basic Skills. The data are reported in narrative and tabular form in Chapter 4.

Baseline data from 1991-92 were compared with 1992-93 data for Grades 3 through 5 to determine if there was a 5 percent increase in the number of students passing the communications and mathematics portions of the divisionwide criterion-referenced tests. The data are reported in narrative and tabular form in Chapter 4.

Using the dependent t-test, baseline data from 1990-91 and 1991-92 on the same cohort group were compared with 1992-93 data to determine if there were statistically significant differences at the .05 level in the mean level of achievement on final report card grades in communication skills and mathematics. The data are reported in narrative and tabular form in Chapter 4.

Using the Chi Square Test of Independence, baseline data from 1989-90, 1990-91, and 1991-92 were compared with 1992-93 data to determine if there were a relationship between the number of fourth graders passing or failing the Degrees of Reading Power portion of the Virginia State

Predictor Tests and the year the test was taken. The data are reported in narrative and tabular form in Chapter 4.

Self-Concept of Students

Using the dependent t-test, posttest scores of fourth and fifth graders were compared with their pretest scores to determine if there were statistically significant differences at the .05 level. The data are reported in narrative and tabular form in Chapter 4.

Using the dependent t-test, posttest scores of fourth and fifth graders who participated in small group counseling were analyzed to determine if there were statistically significant differences at the .05 level. The data are reported in narrative and tabular form in Chapter 4.

School Climate

The overall 1992-93 survey mean of favorable responses on the Student Survey for Jacox's Climate Correlate was analyzed to determine if 80 percent of the Jacox students in Grades kindergarten through fifth perceived the school climate promoted a positive, safe, friendly, and nurturing climate. The data are reported in narrative and tabular form in Chapter 4.

Using an independent t-test, baseline data from 1991-92 were compared with 1992-93 data to determine if there were statistically significant differences

at the .05 level in the means on the Student Survey for Jacox's Climate Correlate. The data are reported in narrative and tabular form in Chapter 4.

Average daily student attendance for academic year 1992-93 was analyzed to determine if it met or exceeded 94 percent attendance. The data are reported in narrative and tabular form in Chapter 4.

The Jacox faculty group subscale average raw scores were compared with the national group subscale average raw scores to determine the school climate perceptions of the Jacox faculty based on comparisons with national responses. The data are reported in narrative and tabular form in Chapter 4.

Average daily teacher attendance for academic year 1992-93 was analyzed to determine if it met or exceeded 94 percent attendance. The data are reported in narrative and tabular form in Chapter 4. A data analysis summary is reported in Figure 3.

Responses to open-ended questions were analyzed to determine the significance of the responses. A summary of the responses is reported in narrative form in Appendix D.

GOAL	ACTIVITY	SUBJECTS	INSTRUMENTATION	DATA GATHERING	DATA ANALYSIS
<p>#1 To improve student academic achievement</p>	<ul style="list-style-type: none"> > Changed leadership > Changed faculty > Decreased pupil/teacher ratio > Increased teachers' salaries 	<ul style="list-style-type: none"> > All second, third, and fourth graders present at Jacox during the standardized testing, N=246 	<ul style="list-style-type: none"> > Iowa Tests of Basic Skills <ul style="list-style-type: none"> ■ Fourth grade, Level 10, Form G, N = 96 ■ Third grade, Level 9, Form H, N = 86 ■ Second grade, Level 8, Form H, N = 64 	<p>March 22 - April 2, 1993 Baseline data available for 1989-90, 1990-91, and 1991-92</p>	<p>Using a one-way analysis of variance (ANOVA), baseline from 1989-90, 1990-91, and 1991-92 were compared with 1992-93 data for each grade level (second-fourth) to determine if there were significant differences (.05 level) in the average composite scores. The data are reported in narrative and tabular form in Chapter 4.</p>

Figure 3. Summary of Subjects, Instrumentation, Data Gathering, and Data Analysis

GOAL	ACTIVITY	SUBJECTS	INSTRUMENTATION	DATA GATHERING	DATA ANALYSIS
		> All third, fourth, & fifth grade students present at Jacox during the divisionwide criterion-referenced testing (CRT) for 1992-93. Communication Skills: Grade 3, N=85 Grade 4, N=97 Grade 5, N=94 Mathematics: Grade 3, N=100 Grade 4, N=103 Grade 5, N=90	> Divisionwide criterion-referenced tests Communication skills and Mathematics	> June 1-4, 1993 Baseline data available for 1991-92	> Baseline data from 1991-92 were compared with 1992-93 data for Grades 3 through 5 to determine if there was a 5% increase in the number of students passing the communication skills and mathematics portions of the divisionwide criterion-referenced tests. The data are reported in narrative and tabular form in Chapter 4.

Figure 3. Summary of Subjects, Instrumentation, Data Gathering, and Data Analysis

GOAL	ACTIVITY	SUBJECTS	INSTRUMENTATION	DATA GATHERING	DATA ANALYSIS
		> Fourth graders enrolled at Jacox since second grade, N=53	> Final grades on report cards <ul style="list-style-type: none"> ■ Communication skills & Mathematics 	> June 11, 1993 Baseline data available for 1990-91 and 1991-92 on the same cohort group	> Using the dependent t-test, baseline data from 1990-91 and 1991-92 on the same cohort group were compared with 1992-93 data to determine if there were statistically significant increases (.05 level) in the mean level of achievement on final report card grades in communication skills and mathematics. The data are reported in narrative and tabular form in Chapter 4.

Figure 3. Summary of Subjects, Instrumentation, Data Gathering, and Data Analysis

GOAL	ACTIVITY	SUBJECTS	INSTRUMENTATION	DATA GATHERING	DATA ANALYSIS
		> Fourth graders present at Jacox during the administration of the Degrees of Reading Power portion of the Virginia State Literacy Predictor Tests, N=96	> Degrees of Reading Power portion of the Virginia State Literacy Predictor Tests	> April 26-30, 1993 Baseline data available for 1989-90, 1990-91, and 1991-92	> Using the Chi Square Test, baseline data from 1989-90, 1990-91, and 1991-92 were compared with 1992-93 data to determine if there were statistically significant differences (.05 level) in the fourth graders passing the Degrees of Reading Power portion of the Virginia State Literacy Predictor Tests. The data are reported in narrative and tabular form in Chapter 4.

Figure 3. Summary of Subjects, Instrumentation, Data Gathering, and Data Analysis

GOAL	ACTIVITY	SUBJECTS	INSTRUMENTATION	DATA GATHERING	DATA ANALYSIS
#2 To improve the self-concept of students	> All professional staff attended inservice training for 4 half-days August 18-21, 1992 TOPICS: * Sensitivity to the Urban Learner * Culture of the Urban Learner * Developmentally appropriate practices * Classroom Management	> Fourth and fifth graders present at Jacox during the administration of the Piers-Harris Children's Self-Concept Scale pretest and posttest, N=171	> Piers-Harris Children's Self-Concept Scale	> October 16, 1992 (pretest) May 14, 1993 (posttest)	> Using the dependent t-test, posttest scores of fourth and fifth graders were compared with their pretest scores to determine if there were statistically significant differences (.05 level). The data are reported in narrative and tabular form in Chapter 4.

Figure 3. Summary of Subjects, Instrumentation, Data Gathering, and Data Analysis

GOAL	ACTIVITY	SUBJECTS	INSTRUMENTATION	DATA GATHERING	DATA ANALYSIS
	<p>> One full-time and one part-time guidance counselors conducted small group counseling sessions with students whose pretest scores were in the bottom three stanines of the Piers-Harris Children's Self-Concept Scale</p>	<p>> Fourth and fifth graders who participated in small group counseling sessions, N=21</p>	<p>> Piers-Harris Children's Self-Concept Scale</p>	<p>> October 16, 1992 (pretest) May 14, 1993 (posttest)</p>	<p>> Using the dependent t-test, posttest scores of fourth and fifth graders who participated in small group counseling sessions were analyzed to determine if there were statistically significant gains (.05 level). The data are reported in narrative and tabular form in Chapter 4.</p>

Figure 3. Summary of Subjects, Instrumentation, Data Gathering, and Data Analysis

GOAL	ACTIVITY	SUBJECTS	INSTRUMENTATION	DATA GATHERING	DATA ANALYSIS
<p>#3 To improve the school climate as perceived by students</p>	<p>FOCUS ON:</p> <ul style="list-style-type: none"> > Student/Teacher relationships > Security > Building upkeep > Grounds upkeep > Student behavior values > Student/student relationships > Discipline > Quality of the school 	<ul style="list-style-type: none"> > All students Kindergarten-fifth grade present at Jacox during the administration of the Student Survey for Jacox's Climate Correlate, 1991-92, N=502 1992-93, N=534 	<ul style="list-style-type: none"> > Student Survey for Jacox's Climate Correlate 	<ul style="list-style-type: none"> > May 1992 May 1993 	<ul style="list-style-type: none"> > The 1992-93 scores on the Student Survey for Jacox's Climate Correlate were analyzed to determine if 80% of the Jacox students perceived the school climate promoted a positive, safe, friendly, and nurturing climate. The data are reported in narrative and tabular form in Chapter 4. > Using an independent t-test, baseline data from May 1992 were compared with May 1993 data to determine if there were statistically significant differences (.05 level) in the means on the Student Survey for Jacox's Climate Correlate. The data are reported in narrative and tabular form in Chapter 4.

Figure 3. Summary of Subjects, Instrumentation, Data Gathering, and Data Analysis

GOAL	ACTIVITY	SUBJECTS	INSTRUMENTATION	DATA GATHERING	DATA ANALYSIS
		> All students enrolled at Jacox, N = 677	> Attendance records	> September 1992 - June 1993	> Average daily student attendance for academic year 1992-93 was analyzed to determine if it met or exceeded 94%. The data are reported in narrative and tabular form in Chapter 4.
#4 To improve the school climate as perceived by teachers	> Environment Reflects: <ul style="list-style-type: none"> ■ Respect for individuals ■ Student, parent, community, and administrative support ■ Teacher efficacy ■ Collegiality ■ Trust ■ Caring 	> All full-time professional staff completing the NASSP School Climate Survey for Teachers, N=47	> NASSP School Climate Survey for Teachers	> May 1993	> The Jacox faculty group subscale average raw scores were compared with the national group subscale average raw scores to determine the school climate perceptions of the Jacox faculty.

Figure 3. Summary of Subjects, Instrumentation, Data Gathering, and Data Analysis

GOAL	ACTIVITY	SUBJECTS	INSTRUMENTATION	DATA GATHERING	DATA ANALYSIS
		> All Jacox staff members under teacher contracts, N=49	> Attendance records	> August 1992 - June 1993	> Average daily teacher attendance for academic 1992-93 was analyzed to determine if it met or exceeded 94%. The data are reported in narrative and tabular form in Chapter 4.
		> Two teachers per grade level and five resource teachers, N=19	> Open-ended interview	> May - June 1993	> Responses to open-ended questions were analyzed to determine the significance of the responses. A summary of the responses is reported in narrative form in Appendix D.

Figure 3. Summary of Subjects, Instrumentation, Data Gathering, and Data Analysis

CHAPTER 4

Results

The purpose of this chapter is to present the data and results of the study. The data for the study were collected to answer the major research question: Is the Jacox Elementary School Improvement Program meeting the stated goals? Three additional subquestions were used to focus the study: 1) Did students improve academically?, 2) Was the self-concept of students improved?, and 3) Was the school climate as perceived by students and teachers positively changed?

This is a descriptive study. The statistical analyses and findings are organized and presented under the major research question and each sub-question.

Major Research Question: Is the Jacox Elementary School Improvement Program Effective in Achieving its Stated Goals?

1. Did students improve academically?
 - 1a. By March 1993, there will be a statistically significant difference (.05 level) in the average composite Iowa Tests of Basic Skills scores for Grades 2 through 4 as evidenced by a comparison with baseline data from 1989-90, 1990-91, and 1991-92.

For each grade level (Grades 2-4), a One Way Analysis of Variance (ANOVA) was conducted on each group's average composite Iowa Tests of

Basic Skills percentile ranks from the Normal Curve Equivalents (Group 1/1989-90, Group 2/1990-91, Group 3/1991-92, and Group 4/1992-93). The 1992-93 second grade average composite Iowa Tests for Basic Skills percentile ranks were compared to the percentile ranks for second graders in 1989-90, 1990-91, and 1991-92. Similar comparisons were made for third and fourth grade average composite Iowa Tests of Basic Skills percentile ranks. Following are the results.

Table 1 shows an ANOVA Table for Grade 2 with the F value of 8.12 with 3, 333 df and a probability level of less than .05 which indicated that at least two population means were different. The Tukey test of post hoc comparison was used to look at the means. Using the Tukey test of post hoc comparison, the following means were significantly different at the .05 level: 1) the mean for 1991-92 ($\bar{x} = 42/SD = 18$) was significantly different from the mean for 1992-93 ($\bar{x} = 30/SD = 16$); 2) the mean for 1990-91 ($\bar{x} = 41/SD = 15$) was significantly different from the mean for 1992-93 ($\bar{x} = 30/SD = 16$); and 3) the mean for 1989-90 ($\bar{x} = 30/SD = 15$) was significantly different from the mean for 1992-93 ($\bar{x} = 30/SD = 16$). The 1992-93 mean ($\bar{x} = 30/SD = 16$) was significantly lower from all three means from the previous years (1989-90, 1990-91, and 1991-92), but the three means from 1989-90, 1990-91, and 1991-92 were not statistically different from each other. The program goal for Grade 2 was not met.

Table 1

Summary of a Comparison of Average Iowa Tests of Basic Skills Scores for Grade 2 Including Academic Years 1989-90, 1990-91, 1991-92, and 1992-93 Using an ANOVA Table

1989-90	N = 100	$\bar{x} = 39$	SD = 15	
1990-91	N = 86	$\bar{x} = 41$	SD = 15	
1991-92	N = 87	$\bar{x} = 42$	SD = 18	
1992-93	N = 64	$\bar{x} = 30$	SD = 16	
ANOVA TABLE				
SOURCES	DF	SS	MS	F
Groups	3	6250.33	2083.44	8.12*
Error	333	85391.856	256.432	
Total	336			
Fcv (3, 333) = 2.65				

*Statistical Significance ($p \leq .05$).

Table 2 shows an ANOVA Table for Grade 3 with the F value of 8.72 with 3, 379 df and a probability level of less than .05 which indicated that at least two population means were different. The Tukey test of post hoc comparison was used to look at the means. Using the Tukey test of post hoc comparison, the following means were significantly different at the .05 level: 1) the mean for 1990-91 ($\bar{x} = 44/SD = 15$) was significantly different from the mean for 1989-90 ($\bar{x} = 39/SD = 16$), 1991-92 ($\bar{x} = 35/SD = 18$), and 1992-93 ($\bar{x} = 33/SD = 16$); and 2) the mean for 1989-90 ($\bar{x} = 39/SD = 16$) was significantly different from the means for 1991-92 ($\bar{x} = 35/SD = 18$) and 1992-93 ($\bar{x} = 33/SD = 16$). The 1992-93 mean ($\bar{x} = 33/SD = 16$) was significantly lower from the means for 1989-90 and 1990-91. Although the 1992-93 mean was not significantly lower than 1991-92, it was lower, therefore, the program goal for Grade 3 was not met.

Table 3 shows an ANOVA Table for Grade 4 with the F value of 13.74 with 3, 356 df and a probability level of less than .05 which indicated that at least two population means were different. The Tukey test of post hoc comparison was used to look at the means. Using the Tukey test of post hoc comparison, the following means were significantly different at the .05 level: 1) the means for 1989-90 ($\bar{x} = 45/SD = 14$) and 1990-91 ($\bar{x} = 45/SD = 14$) were significantly different from the means for 1991-92 ($\bar{x} = 38/SD = 14$) and 1992-93 ($\bar{x} = 33/SD = 17$); and 2) the mean for 1991-92 ($\bar{x} = 38/SD = 14$) was significantly different from the mean for 1992-93 ($\bar{x} = 33/SD = 17$). The

Table 2

Summary of a Comparison of Average Iowa Tests of Basic Skills Scores for Grade 3 Including Academic Years 1989-90, 1990-91, 1991-92, and 1992-93 Using an ANOVA Table

1989-90	N = 96	$\bar{x} = 39$	SD = 16	
1990-91	N = 106	$\bar{x} = 44$	SD = 15	
1991-92	N = 95	$\bar{x} = 35$	SD = 18	
1992-93	N = 86	$\bar{x} = 33$	SD = 16	
ANOVA TABLE				
SOURCES	DF	SS	MS	F
Groups	3	6916.25	2305.416	8.72*
Error	379	100160.983	264.277	
Total	382			
Fcv (3,379) = 2.65				

*Statistical Significance ($p \leq .05$).

Table 3

Summary of a Comparison of Average Iowa Tests of Basic Skills Scores for Grade 4 Including Academic Years 1989-90, 1990-91, 1991-92, and 1992-93 Using an ANOVA Table

1989-90	N = 77	\bar{x} = 45	SD = 14	
1990-91	N = 83	\bar{x} = 45	SD = 14	
1991-92	N = 104	\bar{x} = 38	SD = 14	
1992-93	N = 96	\bar{x} = 33	SD = 17	
ANOVA TABLE				
SOURCES	DF	SS	MS	F
Groups	3	9102.22	3034.073	13.74*
Error	356	78415.052	220.817	
Total	359			
Fcv (3,356) = 2.63				

*Statistical Significance ($p \leq .05$).

1992-93 mean ($\bar{x} = 33/SD = 17$) was significantly lower from all three means from the previous years (1989-90, 1990-91, and 1991-92). The program goal for Grade 4 was not met.

- 1b. By June 1993, there will be a 5 percent* increase in the number of students in Grades 3 through 5 passing the communication skills and mathematics portions of the divisionwide criterion-referenced tests as evidenced by a comparison with baseline data from 1991-92. (* Student outcome goal obtained from the Jacox Biennial School Improvement Plan 1991-93.)

Table 4 shows the results from the communication skills portion of the divisionwide criterion-referenced tests. For Grade 3, 41.4 percent more of the students passed the communication skills portion of the tests in 1992-93 than in 1991-92. For Grade 4, 16.4 percent more of the students passed the communication skills portion of the tests in 1992-93 than in 1991-92. For Grade 5, 3.9 percent fewer students passed the communications skills portion of the tests in 1992-93 than in 1991-92. The program goals for Grades 3 and 4 were met. The program goal for Grade 5 was not met.

Table 5 shows the results from the communication skills portion of the divisionwide criterion-referenced tests by cohort groups. In 1992-93, 20.4 percent more fourth graders passed the test than the same group of students in 1991-92 when they were in third grade. Of the 96 third graders tested in 1991-92, 74 were tested in the fourth grade in 1992-93. The fourth grade cohort group contained 77.0 percent of the original group tested. In 1992-93,

Table 4

Summary of the Number of Students in Grades 3 through 5
 Passing the Communication Skills Portion of the Divisionwide
 Criterion-Referenced Tests as Evidenced by a Comparison With
 Baseline Data from 1991-92

	YEAR	NUMBER TESTED	NUMBER PASSING	PERCENT PASSING
GRADE 3	1991-92	96	19	19.8
	1992-93	85	52	61.2
				GAIN 41.4
GRADE 4	1991-92	105	25	23.8
	1992-93	97	39	40.2
				GAIN 16.4
GRADE 5	1991-92	75	38	50.7
	1992-93	94	44	46.8
				DECLINE 3.9

Table 5

Summary of the Number of Students in Grades 4 and 5 Passing the Communications Skills Portion of the Divisionwide Criterion-Referenced Tests by Cohort Groups as Evidenced by a Comparison with Baseline Data from 1991-92

COHORT GROUP 1				
GRADE	YEAR	NUMBER TESTED	NUMBER PASSING	PERCENT PASSING
3	1991-92	96	19	19.8
4	1992-93	97	39	40.2*
				GAIN 20.4
COHORT GROUP 2				
GRADE	YEAR	NUMBER TESTED	NUMBER PASSING	PERCENT PASSING
4	1991-92	105	25	23.8
5	1992-93	94	44	46.8**
				GAIN 23.0

*Contains 77.0 percent of the original group tested.

**Contains 68.6 percent of the original group tested.

23.0 percent more fifth graders passed the test than the same group of students in 1991-92 when they were in fourth grade. Of the 105 fourth graders tested in 1991-92, 72 were tested in the fifth grade in 1992-93. The fifth grade cohort group contained 68.6 percent of the original group tested. When the data were compared by cohort groups, the program goals for Grades 4 and 5 were met.

Table 6 shows the results from the mathematics portion of the divisionwide criterion-referenced tests. For Grade 3, 6.4 percent more of the students passed the mathematics portion of the tests in 1992-93 than in 1991-92. For Grade 4, 5.2 percent more students passed the mathematics portion of the tests in 1992-93 than in 1991-92. For Grade 5, 9.8 percent fewer students passed the mathematics portion of the tests in 1992-93 than in 1991-92. The program goals for Grades 3 and 4 were met. The program goal for Grade 5 was not met.

Table 7 shows the results from the mathematics portion of the divisionwide criterion-referenced tests by cohort groups. In 1992-93, 5.8 percent more fourth graders passed the test than the same group of students in 1991-92 when they were in third grade. Of the 96 third graders tested in 1991-92, 74 were tested in the fourth grade in 1992-93. The fourth grade cohort group contained 77.1 percent of the original group tested. In 1992-93, 7.0 percent more fifth graders passed the test than the same group of students in 1991-92 when they were in fourth grade. Of the 105 fourth graders tested in

Table 6

Summary of the Number of Students in Grades 3 through 5
 Passing the Mathematics Portion of the Divisionwide
 Criterion-Referenced Tests as Evidenced by a Comparison With
 Baseline Data from 1991-92

	YEAR	NUMBER TESTED	NUMBER PASSING	PERCENT PASSING
GRADE 3	1991-92	96	14	14.6
	1992-93	100	21	21.0
				GAIN 6.4
GRADE 4	1991-92	105	16	15.2
	1992-93	103	21	20.4
				GAIN 5.2
GRADE 5	1991-92	75	24	32.0
	1992-93	90	20	22.2
				DECLINE 9.8

Table 7

Summary of the Number of Students in Grades 4 and 5 Passing the Mathematics Portion of the Divisionwide Criterion-Referenced Tests by Cohort Groups as Evidenced by a Comparison with Baseline Data from 1991-92

COHORT GROUP 1				
GRADE	YEAR	NUMBER TESTED	NUMBER PASSING	PERCENT PASSING
3	1991-92	96	14	14.6
4	1992-93	103	21	20.4*
				GAIN 5.8
COHORT GROUP 2				
GRADE	YEAR	NUMBER TESTED	NUMBER PASSING	PERCENT PASSING
4	1991-92	105	16	15.2
5	1992-93	90	20	22.2**
				GAIN 7.0

*Contains 77.1 percent of the original group tested.

**Contains 68.6 percent of the original group tested.

1991-92, 72 were tested in the fifth grade in 1992-93. The fifth grade cohort group contained 68.6 percent of the original group tested. When the data were compared by cohort groups, the program goals for Grades 4 and 5 were met.

- 1c. By June 1993, there will be a statistically significant difference (.05 level) in the mean level of achievement in final report card grades in communication skills and mathematics for fourth graders as evidenced by a comparison with baseline data from 1991-92 on the same cohort group.

A dependent t-test was conducted to determine if there were significant differences between the third grade final report card grades in communication skills and the fourth grade final report card grades in communication skills for the same cohort group. Table 8 reveals a mean difference of .36 and a t-value of 2.71 with 52 df and a probability level of less than .05 which indicated a significant difference between final report card grades in communication skills for Grade 3 and Grade 4. The program goal was met.

A dependent t-test was conducted to determine if there were significant differences between the third grade final report card grades in mathematics and the fourth grade final report card grades in mathematics for the same cohort group. Table 9 reveals a mean difference 1.88 and a t-value of .136 with 52 df and a probability level greater than .05 which indicated no significant difference between final report card grades in mathematics for Grade 3 and Grade 4. The program goal was not met.

Table 8

Summary of Final Report Card Grades for Communication Skills for Grade 3 in 1991-92 and the Same Cohort Group for Grade 4 in 1992-93 Using a Dependent T-Test

MEASURE	N	\bar{x}	\bar{x} DIFFERENCE	SD	T-VALUE
1991-92 Final Report Card Grades Grade 3	53	2.906			
			.358	.1322	2.71
1992-93 Final Report Card Grades Grade 4	53	3.264			
df = 52; p < .0063 *					

*Statistical Significance (p ≤ .05)

+ Grade Point Average Scale

A = 5.0

B = 4.0

C = 3.0

D = 2.0

E = 1.0

Table 9

Summary of Final Report Card Grades for Mathematics
for Grade 3 in 1991-92 and the Same Cohort Group for Grade 4
in 1992-93 Using a Dependent T-Test

MEASURE	N	\bar{x}	\bar{x} DIFFERENCE	SD	T-VALUE
1991-92 Final Report Card Grades Grade 3	53	3.132			
			.019	.139	.136
1992-93 Final Report Card Grades Grade 4	53	3.151			
df = 52; p < .8923					

+ Grade Point Average Scale

- A = 5.0
- B = 4.0
- C = 3.0
- D = 2.0
- E = 1.0

- 1d. By April 1993, there will be a statistically significant difference (.05 level) in the number of fourth grade students passing the reading comprehension portion of the Virginia State Literacy Predictor Tests as evidenced by a comparison with baseline data from 1989-90, 1990-91, and 1991-92.

Table 10 shows a Chi Square value of 8.938 with 3 df which indicated that there is a significant relationship between the number of students passing or failing the reading comprehension portion of the Virginia State Literacy Predictor Tests and the year the tests were taken. This means that significantly more students passed the test in a given year than in another year. In 1989-90, 36 percent of the students passed the test and 64 percent failed. In 1990-91, 43 percent of the students passed the test and 57 percent failed. In 1991-92, 24 percent of the students passed the test and 76 percent failed. In 1992-93, the year under examination, 30 percent of the students passed the test and 70 percent failed. Five more students passed the test in 1992-93 than passed in 1991-92. The percentage of students passing the test increased by 6 percent from 1991-92 to 1992-93; however, the baseline years of 1989-90 and 1990-91 had a higher percentage of students passing the test.

2. Was the self-concept of students improved?
 - 2a. By May 1993, fourth and fifth grade students who participated in self-concept small group counseling will score above the bottom three stanines of the Piers-Harris Children's Self-Concept Scale as evidenced by posttest data.

Table 10

Summary of Frequency Responses of Fourth Graders Passing and Failing the Reading Comprehension Portion of the Virginia State Literacy Predictor Tests for Academic Years 1989-90, 1990-91, 1991-92, and 1992-93 Using Chi Square Test

OBSERVED AND EXPECTED FREQUENCIES			
	PASSED	FAILED	TOTALS
Year 1 1989-90	28 (25.16)	49 (51.84)	77
Year 2 1990-91	36 (27.13)	47 (55.87)	83
Year 3 1991-92	24 (33.34)	78 (68.66)	102
Year 4 1992-93	29 (31.37)	67 (64.63)	96
	117	241	358
<p>$X^2 = 8.938$</p> <p>$X^2_{cv} (df=3) 7.82$</p> <p>Reject the null; There is a significant relationship between the number of students passing/failing the reading comprehension portion of the Virginia State Literacy Predictor Tests and the year the tests were taken.</p>			

Table 11

Summary of the Number of Students in Grade 4 Passing the Reading Comprehension Portion of the Virginia State Literacy Predictor Tests with Baseline Data from 1989-90, 1990-91, 1991-92, and 1992-93

GRADE 4				
YEAR	NUMBER TESTED	NUMBER PASSING	NUMBER FAILING	PERCENT PASSING
1989-90	77	28	49	36
1990-91	83	36	47	43
1991-92	102	24	78	24
1992-93	96	29	67	30

Twenty-one fourth and fifth grade students participated in small group counseling sessions during the 1992-93 academic year. Of the 21 students, posttest data were available on 18 students. Of the 18 students, 8 scored above the bottom three stanines on the Piers-Harris Children's Self-Concept Scale posttest. This represented 44 percent of the students who participated in small group counseling sessions. This meant that 56 percent continued to score at or below the bottom three stanines on the Piers-Harris Children's Self-Concept Scale. The program goal was not met. Table 12 summarizes this information.

A dependent t-test was conducted to determine if there were significant differences between the Piers-Harris Children's Self-Concept Scale pretest mean and the posttest mean for students in Grades 4 and 5 who participated in small group counseling sessions. Table 13 reveals a mean difference of 3.94 and a t-value of 1.529 with 17 df and a probability level greater than .05 which indicates there is no significant difference between the pretest mean and the posttest mean. Table 13 summarizes this information.

- 2b. By June 1993, there will be a statistically significant difference in the means of the pretest and posttest for fourth and fifth graders on the Piers-Harris Children's Self-Concept Scale.

A dependent t-test was conducted to determine if there were significant differences between the Piers-Harris Children's Self-Concept Scale pretest mean and the posttest mean. Table 14 reveals a mean difference of .122 and

Table 12

Summary of Fourth and Fifth Grade Students' Piers-Harris Children's Self-Concept Scale Results Before and After Small Group Counseling Sessions During the Academic Year 1992-93

STUDENT	PRETEST SCORE IN STANINES	POSTTEST SCORE IN STANINES
A	3	8
B	2	1
C	2	2
D	1	Not Available
E	3	2
F	3	Not Available
G	3	2
H	3	Not Available
I	3	5
J	2	4
K	3	2
L	3	4
M	3	5
N	2	5
O	3	4
P	3	4
Q	3	3
R	1	2
S	3	3
T	3	3
U	1	2
44 percent scored above the bottom three stanines on the posttest.		

Table 13

Summary of Piers-Harris Children's Self-Concept Scale
 Pretest and Posttest Data for Students in Grades 4 and 5
 Who Participated in Small Group Counseling Sessions
 Using a Dependent T-Test

MEASURE	N	\bar{x}	\bar{x} DIFFERENCE	SD	T-VALUE
Piers-Harris Children's Self- Concept Scale Pretest Sept. 1992	18	36.0			
			3.944	2.58	1.529
Piers-Harris Children's Self- Concept Scale Posttest May 1993	18	39.944			
df = 17; p < .1447					

Table 14

Summary of Piers-Harris Children's Self-Concept Scale
 Pretest and Posttest Data for Students in Grades 4 and 5
 Using a Dependent T-Test

MEASURE	N	\bar{x}	\bar{x} DIFFERENCE	SD	T-VALUE
Piers-Harris Children's Self- Concept Scale Pretest Sept. 1992	171	58.591			
			.123	.780	.158
Piers-Harris Children's Self- Concept Scale Posttest May 1993	171	58.468			
df = 170; p < .8749					

a t-value of .158 with 170 df and a probability level greater than .05 which indicated that there was no significant difference between the pretest mean and the posttest mean. The program goal was not met.

3. Was the school climate as perceived by students and teachers positively changed?
- 3a. By June 1993, a minimum of 80 percent* of the Jacox students in kindergarten through Grade 5 will perceive that the school climate promotes a positive, safe, friendly, and nurturing climate as evidenced by the scores on the Student Survey for Jacox Elementary's Climate Correlate.
(* Outcome goal obtained from the Jacox Biennial School Improvement Plan 1991-93.)

The Student Survey for Jacox Elementary's Climate Correlate was machine scored. Table 15 reveals that overall 49 percent of the students rated the Jacox school climate as favorable. The survey responses were based on a Likert scale ranging from nonfavorable (one and two) to favorable (four and five). A rating of three indicated uncertain. A rating below 3.0 was interpreted to mean more nonfavorable, while a rating above 3.0 was interpreted to mean more favorable. Table 16 shows a comparison with the 1991-92 survey results. Appendix C contains additional survey data. The program goal was not met.

Table 15

Summary of the Survey for Jacox Elementary's Climate
Correlate Results for 1992-93 in Percent

PERCENT NONFAVORABLE	PERCENT UNCERTAIN	PERCENT FAVORABLE
14	37	49

Table 16

Summary of a Comparison Between 1991-92 and 1992-93
Surveys for Jacox Elementary's Climate Correlate Results

		PERCENT NONFAVORABLE	PERCENT UNCERTAIN	PERCENT FAVORABLE
1991-92	N = 502	12	47	41
1992-93	N = 534	14	37	49

- 3b. By June 1993, there will be a statistically significant difference (.05 level) in the mean on the Student Survey for Jacox Elementary's Climate Correlate 1992-93 survey scores as evidenced by a comparison with 1991-92 data.

An independent t-test was conducted to determine if there were significant differences (.05 level) in the mean on the Student Survey for Jacox Elementary's Climate Correlate 1992-93 survey when compared with the mean of the 1991-92 survey. Table 17 reveals a t-value of 3.53 with 1033 df and a critical value of 1.96 which is statistically significant at the .05 level. While the program goal was met based on statistical significance, caution should be used when interpreting these findings. The mean difference of .17 should be examined on the basis of its practical significance.

- 3c. By June 1993, average daily student attendance should meet or exceed 94 percent* as evidenced by attendance reports.
(* Outcome goal obtained from the Jacox Biennial School Improvement Plan 1991-93.)

Table 18 reveals a summary of average daily student attendance for 1990-91, 1991-92, and 1992-93 obtained from the School Improvement Goals 1992-93 End-of-Year report for Jacox Elementary School. For the 1992-93 school year, the average daily student attendance was 94.0 percent. The program goal for average daily student attendance was met.

Table 17

Summary of a Comparison Between the Mean on the 1991-92 Survey and the Mean on the 1992-93 Survey for Jacox Elementary's Climate Correlate Using an Independent T-Test

YEAR	N	MEAN	SD	VARIANCE	STANDARD ERROR	CV
1991-92	502	3.31	.72	.52	.03	21.74
1992-93	534	3.49	.90	.82	.04	25.89
t-value = 3.53						
tcv (1033 df) .05 level = 1.96						

Table 18

Summary of the Average Daily Student Attendance for 1990-91, 1991-92, and 1992-93 as Evidenced by the School Improvement Goals 1992-93 End-of-Year Report for Jacox Elementary School

YEAR	AVERAGE DAILY STUDENT ATTENDANCE IN PERCENT
1990-91	93.1
1991-92	92.6
1992-93	94.0

- 3d. By June 1993, the Jacox faculty will perceive that the school climate promotes a positive, safe, friendly, and nurturing climate as evidenced by a comparison of the Jacox faculty scores on the National Association of Secondary School Principals Teacher School Climate Survey with national scores.

The National Association of Secondary School Principals Teacher School Climate Survey results were hand-scored to generate subscale raw scores. The total subscale values were divided by the number of respondents to obtain group subscale average raw scores for each subscale. The Jacox faculty group subscale average raw scores were compared with the national group subscale average raw scores. Table 19 reveals a comparison between the results of the National Association of Secondary School Principals Teacher School Climate Survey administered to the Jacox faculty and the national survey results supplied by the National Association of Secondary School Principals. The Jacox faculty rated three areas higher than the national means. Those areas included teacher/student relationships, administration, and guidance. Since the Jacox faculty indicated that there were a number of subscale categories below the national response ratings, this goal was not met.

- 3e. By June 1993, average daily teacher attendance should meet or exceed 94 percent as evidenced by attendance reports.

Table 20 reveals a summary of average daily teacher attendance for 1990-91, 1991-92, and 1992-93 obtained from the divisionwide school profile

Table 19

Summary of the Jacox Faculty Group Subscale Average Raw Scores and the National Group Subscale Average Raw Scores

SUBSCALE NAME	NATIONAL			JACOX		
	N	MEAN	SD	N	MEAN	SD
Teacher/Student Relationships	1442	47.7	5.9	47	52.5	1.5
Security & Maintenance	1595	28.4	4.5	47	25.7	4.9
Administration	1585	22.8	4.2	47	27.0	4.5
Student Academic Orientation	1643	14.1	2.9	47	13.7	3.9
Student Behavioral Values	1611	9.0	2.3	47	6.3	1.8
Guidance	1588	16.1	2.4	46	18.0	4.8
Student/Peer Relationships	1624	14.8	2.4	47	13.4	2.6
Parent/Community School Relationships	1431	13.2	3.2	47	9.0	3.1
Instructional Management	1578	27.4	4.1	47	26.1	4.9
Student Activities	1479	16.2	2.6	46	15.8	3.1

Table 20

Summary of the Average Daily Teacher Attendance for 1990-91,
1991-92, and 1992-93 from the Divisionwide School Profiles
Reports in Percent

YEAR	AVERAGE DAILY TEACHER ATTENDANCE IN PERCENT
1990-91	97.5
1991-92	73.6
1992-93	95.9

reports. For 1992-93 school year, the average daily teacher attendance was 95.9 percent. The program goal for average daily teacher attendance was met.

CHAPTER 5

Summary, Discussion, Conclusions, and Recommendations

The purpose of this study was to evaluate the Jacox Elementary School Improvement program. It was designed to determine the extent to which the program was effective in achieving its goals. Chapter 5 contains a summary of the study, a discussion of the findings, conclusions, and recommendations.

Summary

Addressing the barriers to student achievement is a difficult task. Researchers have been able to determine the risk factors which impact student achievement, but have not been successful in pinpointing educational interventions that can result in significant improvements, particularly in urban schools. School divisions have an obligation to society to provide a quality education for all students which ensures academic achievement. While many intervention programs have been implemented and evaluated, few seem to specifically address the special needs of the urban learner to help break their patterns of low achievement, dropping out, and poverty; thus providing the need for the current study which was conceived to examine the goals of the Jacox Elementary School Improvement Program.

Three areas were examined including student academic achievement, the self-concept of students, and the school climate as perceived by students and teachers. Three instruments were used to examine student academic achievement: 1) the Iowa Tests of Basic Skills, 2) the communication skills and mathematics portions of the divisionwide criterion-referenced tests, and 3) the reading comprehension portion of the Virginia State Literacy Predictor Tests. In addition, the final report card grades for communication skills and mathematics were used to assess student academic achievement.

To analyze the student academic achievement data, statistical tests were applied and comparisons were made with baseline data. For all statistical tests, an alpha level of .05 was employed to determine whether the data being analyzed was statistically significant. The findings suggested that when certain assessment measures were used, students in some grade levels improved academically. Specifically, students in Grades 3 and 4 made academic gains in percentages on the communications skills and mathematics criterion-referenced tests; students in Grade 4 made academic gains on the communications skills final report card grades; and more students in the 1992-93 Grade 4 group passed the reading comprehension portion of the Literacy Predictor Tests than the 1991-92 Grade 4 group.

One instrument was used to assess the self-concept of students, the Piers-Harris Children's Self-Concept Scale. A dependent t-test was conducted to determine if there were significant differences in the pretest and posttest

scores. An alpha level of .05 was employed to determine whether the data being analyzed were statistically significant. The findings suggested that while the self-concept scores of some students improved, there were no significant differences between the pretest and posttest means of the Piers-Harris Children's Self-Concept Scale.

One instrument was used by students and a different instrument was used by teachers to examine school climate perceptions. The student survey, The Student Survey for Jacox Elementary's Climate Correlate, was used to assess the school climate as perceived by students. An independent t-test was conducted to determine if there were significant differences between the means of the 1991-92 survey and the 1992-93 survey scores. An alpha level of .05 was used to determine whether the average difference in the two years was statistically significant. The findings suggested that there were significant differences between the means at the .05 level. This difference was very small and, therefore, it is difficult to attach substantive meaning to this difference. Since a statistical significance is a function of sample size, caution should be used when interpreting the results of large sample sizes. Average daily student attendance was also used to assess the school climate as perceived by students. The findings indicated that there was a slight increase in average daily student attendance for 1992-93 when compared with baseline data from 1991-92.

The teacher survey, The National Association of Secondary School Principals Teacher School Climate Survey, was used to assess the school climate as perceived by teachers. The Jacox faculty group subscale average raw scores were compared with the national group subscale average raw scores. The findings suggested that the Jacox faculty rated three areas higher than the national group ratings. Those areas were teacher/student relationships, administration, and guidance. National norms were used as a basis for comparison with the academic year under examination because teacher perceptions of school climate were not available for previous years. As a result, trends in school climate as perceived by teachers could not be determined. Average daily teacher attendance was also used to assess school climate as perceived by teachers. Data from the findings indicated a dramatic increase from 1991-92 baseline data, but not for 1990-91, which had an overall higher average daily teacher attendance percentage than the year under examination.

A summary of the findings for each program goal is listed below.

Student Academic Achievement Outcome

- (1) The measures of academic achievement (ITBS, VSLPT, CRT, & GPA) and the degree to which students experienced positive or negative academic change over a one year academic period have to be approached with caution due to internal validity factors.

- (2) When average composite ITBS scores for Grade 2 were compared with three consecutive years of baseline data, there were significant differences in the population means for 1992-93; however, the significance was in a negative direction. ITBS average composite scores for Grade 2 have declined significantly compared with earlier years (1989-90, 1990-91, and 1991-92). Reasons will be presented in the discussion section. The program goal for Grade 2 was not met.
- (3) When average composite ITBS scores for Grade 3 were compared with three consecutive years of baseline data, there were significant differences in the population means for 1992-93; however, the significance was in a negative direction. ITBS average composite scores for Grade 3 have declined significantly when compared with earlier years (1989-90, 1990-91, and 1991-92). Reasons will be presented in the discussion section. The program goal for Grade 3 was not met.
- (4) When average composite ITBS scores for Grade 4 were compared with three consecutive years of baseline data, there were significant differences in the population means for 1992-93; however, the significance was in a negative direction. ITBS average composite scores for Grade 4 have declined significantly when compared with earlier years (1989-90, 1990-91, and 1991-92). Reasons will be

presented in the discussion section. The program goal for Grade 4 was not met.

- (5) For Grade 3, 41.4 percent more of the students passed the communication skills portion of the criterion-referenced tests in 1992-93 than in 1991-92. The program goal was met.
- (6) For Grade 4, 15.7 percent more of the students passed the communication skills portion of the criterion-referenced tests in the 1992-93 than in 1991-92. The program goal was met.
- (7) For Grade 5, 3.9 percent fewer students passed the communication skills portion of the criterion-referenced tests in 1992-93 than in 1991-92; however, in 1992-93, 23.0 percent more fifth graders passed the communication skills portion of the criterion-referenced tests than the same group of students in 1991-92 when they were in Grade 4. When the data are compared by cohort groups, the program goal for Grade 5 was met.
- (8) For Grade 3, 6.4 percent more of the students passed the mathematics portion of the criterion-referenced tests in 1992-93 than in 1991-92. The program goal was met.
- (9) For Grade 4, 5.2 percent more of the students passed the mathematics portion of the criterion-referenced tests in 1992-93 than in 1991-92. The program goal was met.

- (10) For Grade 5, 9.8 percent fewer students passed the mathematics portion of the criterion-referenced tests in 1992-93 than in 1991-92; however, in 1992-93, 7 percent more fifth graders passed the mathematics portion of the criterion-referenced tests than the same group of students in 1991-92 when they were in Grade 4. When the data are compared by cohort groups, the program goal for Grade 5 was met.
- (11) When Grade 3 final report card grades in communication skills were compared with Grade 4 final report card grades for the same cohort group, it was determined that there were significant differences at the .05 level. The program goal was met.
- (12) When Grade 3 final report card grades in mathematics were compared with Grade 4 final report card grades for the same cohort group, it was determined that there were no significant differences at the .05 level. The program goal was not met.
- (13) The percent of students passing the reading comprehension portion of the Virginia State Literacy Predictor Tests increased in 1992-93 when compared with 1991-92. In 1992-93, 5 more students, representing a 6 percent increase, passed the test when compared with 1991-92.

The Self-Concept of Students

The Piers-Harris Children's Self-Concept Scale is a self-report questionnaire designed to measure self-perceptions. Self-report measures are susceptible to distortions and, therefore, caution must be taken regarding the interpretation of the data. Threats to validity that are common in self-report data include social desirability bias, guessing, and lack of comprehension or self-awareness. Further information on each of these threats to validity is presented in the discussion section.

Self-Concept Outcome

- (1) Of the students who participated in small group counseling sessions, 44 percent scored above the bottom three stanines. The program goal was not met.
- (2) When pretest and posttest means of the Piers-Harris Children's Self-Concept Scale were compared, no significant differences were found at the .05 level. The program goal was not met.

School Climate

The school climate as perceived by students was measured using the Jacox Student Survey for Climate Correlate. This was a teacher-made survey. For this reason, caution must be taken regarding the interpretation of school climate as perceived by students. Since the instrument is used to survey only

the students attending Jacox Elementary School, no reliability and validity data were available.

School Climate as Perceived by Students Outcome

- (1) Overall, 49 percent of the students at Jacox Elementary School rated the Jacox school climate as favorable. The program goal was not met.
- (2) Comparisons between the means of the 1991-92 survey and 1992-93 survey scores indicated a slight percentage increase in school climate as perceived by students for 1992-93. While the difference between the means was statistically significant, it may not be practically significant. Caution should be used in interpreting whether this program goal was met.
- (3) For this evaluation study, student attendance was measured using average daily student attendance. Average daily student attendance is the total number of days attended for a given period of time divided by the number of days in the period (Johns, Morphet, & Alexander, 1983). For the 1992-93 school year, the average daily student attendance was 94.0 percent. The program goal was met.

The school climate as perceived by teachers was measured using the National Association of Secondary School Principals Teacher School Climate Survey. The climate instrument asks individuals to indicate how they think most people in the organization feel about the school. Since this is a

self-report questionnaire, caution must be taken when interpreting the results with regard to school climate as perceived by teachers.

School Climate as Perceived by Teachers Outcome

- (1) The Jacox faculty rated three areas higher than the national means. Those areas included 1) teacher/student relationships--perceptions about the quality of the interpersonal and professional relationships between teachers and students; 2) administration--perceptions of the degree to which school administrators are effective in communicating with different role groups and in setting high performance expectations for teachers and students; and 3) guidance--perceptions of the quality of academic and career guidance and personal counseling services available to students (NASSP Examiner's Manual, 1987).
- (2) For this study, teacher attendance was measured using average daily teacher attendance. Average daily teacher attendance is the total number of days attended for a given period of time divided by the number of days in the period (Johns, Morphet, & Alexander, 1983). For the 1992-93 school year, the average daily teacher attendance was 95.5 percent. The program goal for average daily teacher attendance was met.

Discussion

Urban education research has maintained a need for urban educators to address the barriers to student academic achievement. In schools populated primarily by children who are educationally at risk, "narrowly conceived programs will be unable to overcome widespread academic failure" (Wehlage, Smith, & Lipman, 1992, pp. 63-64). Several studies highlight interventions designed to address the barriers to student academic achievement faced by urban educators (Sizemore, 1988; Hughes, 1988; Mitchell, 1991; Wehlage, Smith, & Lipman, 1992). The findings of these studies support the need to focus on intervention programs that effectively address the barriers to academic achievement facing learners in an urban setting. This study further supported the need to examine programs designed to impact the academic achievement of at-risk students. The strengths of this study were to provide useful information with regard to the goals of the program which were attained. This information can be used to further assess the Jacox Elementary School Improvement program.

In light of the findings, each area will be discussed including student academic achievement, self-concept of students, and the school climate.

Student Academic Achievement

In the area of student academic achievement, some of the program goals were not met. One of the reasons for such findings may be related to

the measures used to assess student academic achievement. For example, historically the Jacox Elementary School student population has performed poorly on standardized tests. This continued to be the case for the school year under examination, 1992-93. By design, standardized tests are constructed to allow for the widest possible range of scores. In other words, to measure high ability students, the test must have enough range in test difficulty to show what the students can do, therefore, standardized tests include a range of test items from very difficult to very easy. According to one standardized test publisher, the typical student will probably respond correctly on only a little more than half of the test items, while the least able students may respond correctly on only a few test items. According to the schoolwide scores on the 1992-93 Iowa Tests of Basic Skills, many of the students at Jacox Elementary School would be ranked among the least able students taking the tests.

Critics of standardized tests believe that there may be reasons why some students perform better than others on such measures of achievement. One reason proposed by critics is that standardized tests may measure something else in addition to the objectives described in the test manual. This has been termed test wiseness; the ability to perceive cues that are independent of the skills on which the test should focus (Morris, Fitz-Gibbon, & Lindheim, 1987). A second reason proposed by critics is that there may be a significant mismatch between what a standardized achievement test actually

measures and what a local instructional program emphasizes. A mismatch between curriculum and measurement may yield misleading data. For this reason, some researchers believe that program evaluators should be cautious when using standardized test data to draw conclusions (Popham, 1988).

Several other factors affect student performance on tests such as test anxiety, familiarity with the testing process, motivation, and the span of time students are given to improve. Some students experience test anxiety prior to taking a test and this feeling may affect their performance. If students are unfamiliar with the test format or lack test-taking skills, their test performance could be affected. Motivation may be an important concern in evaluation studies if the students perceive their performance does not directly affect them, but affects directly the program being evaluated. Some researchers believe that some evaluation studies may be affected by unmotivated students whose behavior negatively affect the evaluation results. Another factor which may affect standardized test outcomes is the span of time students are given to improve their test performance. Since cognitive skills are cumulative, student test performance may not be evident after only one academic year. Evaluators should consider all factors affecting maximal test performance (Berk, 1981).

The Jacox Elementary School student population made academic gains in Grade 3 and 4 on both the communication skills and mathematics criterion-referenced tests. The fifth graders made gains as well on the criterion-referenced tests when data were compared by cohort groups. There

may be several reasons for the successful student academic gains on the criterion-referenced tests. First, proponents of criterion-referenced tests believe that there is generally a match between what the tests measure and what is stressed in a local curriculum. In the case of Jacox Elementary School, the criterion-referenced tests were developed by local curriculum specialists and teachers to measure student mastery of objectives stressed in the local curriculum. Second, teachers at Jacox Elementary School were directed to use the local curriculum when planning for instruction. Both the principal and the teachers of Jacox Elementary School consistently mentioned the stress placed on the use of the local curriculum for both short- and long-term instructional planning. Third, many researchers and educators believe that what the principal stresses usually gets taught. Based on the data collected, it appears that the principal stressed the inclusion of the criterion-referenced objectives in the instructional program and the teachers at Jacox Elementary School used the objectives to focus their instruction.

Final report card grades for communication skills and mathematics also were used as a measure of student academic achievement. Fourth graders who had been at Jacox Elementary School since second grade made significant gains in communication skills when their final report card grades were compared with third grade final report card grades. Significant gains, however, were not made in mathematics when the same students' final report card grades were compared. In general, report card grades are subject to the

teacher's grading practices. For example, one teacher may determine a grade point average by including factors that are unrelated to the actual student performance on a test or project. A teacher may deduct points from a final grade because a project was turned in late, thus the grade reflects something other than the quality of the project. In addition, teachers may consciously or unconsciously inflate report card grades to avoid parent complaints. Also, for some teachers, determining grades may be a difficult task which makes assigning grades open to interpretation. Report card grades are more subjective than standardized and criterion-referenced measures, therefore, caution should be used when drawing conclusions based on them.

There may be several reasons why there were significant gains in communication skills and not in mathematics on final report card grades. One reason may be that communication skills may have been stressed more than mathematics during the school year under examination, 1992-93. Typically, in an elementary classroom schedule longer periods are devoted to communication skills than to mathematics. A second reason may be that teachers at Jacox Elementary School are more confident when teaching communication skills than mathematics or may prefer teaching communication skills than teaching mathematics because they like the subject area of reading more than mathematics. A third reason may be that the Jacox Elementary School students prefer communication skills over mathematics. Students may have more interesting and enticing instructional aides available in

communication skills to peak their interest than in mathematics. In the teacher interviews, several teachers mentioned the lack of manipulatives for mathematics. All of the reasons given for final report card grade performance were speculative and further research would be needed for confirmation of these ideas.

Another measure of student academic achievement used to assess the Jacox Elementary School Improvement Program was the Degrees of Reading Power, the reading comprehension portion of the Virginia Literacy Passport Tests. Although five more students passed the test in 1992-93 than in 1991-92, a considerable number of students continued to fail the test. A recent report issued by the Virginia Department of Education (1993) indicates that state-wide African Americans perform poorly on the Degrees of Reading Power when compared to Caucasians. The report indicates,

In interpreting observed differences in the Virginia Literacy Testing Program results of various groups of Virginia students, one must consider social and economic factors. Research studies have found that students from disadvantaged family backgrounds tend to perform less well on achievement tests than students from advantaged backgrounds. Results of the Virginia Literacy Testing Program have been consistent with these findings (Virginia Department of Education, 1993, pp. 9-10).

The Jacox Elementary School fourth grade Degrees of Reading Power test performance was consistent with the report issued by the Virginia Department of Education (1993). This means that while twenty-nine students passed the Degrees of Reading Power fourth grade predictor test in 1992-93, five more than in 1991-92, sixty-seven students failed the test. If the Degrees

of Reading Power is a valid and reliable instrument for assessing reading comprehension, such test results should be cause for concern. Currently, a state-level task force is reviewing the Literacy Testing program to ensure that the measurement instruments such as the Degrees of Reading Power are free from content bias on the grounds of race and culture as well as other validity and reliability standards.

Self-Concept of Students

Few educators and researchers debate the need for students to have positive, healthy self-concepts. According to Beane (1991), the argument for enhancing self-concept in schools follows three lines of reasoning. First, as a social agency, the school plays a role in contributing to the general health and well-being of children. Second, there is a growing collection of studies on the correlation between self-concept and achievement. Third, enhancing self-concept builds personal efficacy to take action against conditions like racism, sexism, poverty, and homelessness that detract from self-concept. A healthy self-concept gives the child a realistic awareness of self and his abilities and needs (Youngs, 1993). To assist the elementary schools with addressing the self-concept issue, guidance counselors have become an integral part of the elementary school faculty. In Norfolk Public Schools, guidance counselors use the Piers-Harris Children's Self-Concept Scale annually to help assess the self-concept of students. The instrument was part

of the school assessment program and, therefore, it was used to measure the self-concept of students at Jacox Elementary School in relation to the goals stated in the school improvement program. When the means on the pretest and posttest were compared, there were no significant differences. This also was the case for the students involved in the small group counseling sessions.

There may be several reasons why there were no significant differences in the means of the pretest and posttest self-concept test scores. One reason might be that poverty detracts from self-concept. In 1992-93, 97 percent of the students attending Jacox Elementary School received free or reduced breakfast and lunches. This is the measure of student poverty used most frequently by the Virginia Department of Education. Many children of poverty do not have a positive self-concept or even believe that they can achieve in school. Many educators believe that the problem is beyond what the school can address alone. Educators feel that the community must work with the schools to address the problem (Youngs, 1993).

A second reason might be that the development of self-concept in African American children takes place under extremely difficult circumstances. First, the general influence of racism assigns African Americans to a lower caste status. Secondly, some practices associated with schooling such as grade retention and tracking have been damaging to minority children. Thirdly, the support system necessary for the development of a balanced self-concept is often nonexistent for many African American children (Madhere, 1991). To

expect a significant improvement in self-concept in one school year may be an unrealistic expectation.

A third reason deals with the validity of self-report measures. Self-report measures are susceptible to several threats to validity including socially desirable bias, lack of comprehension or self-awareness, and acquiescence on tests which use yes and no response choices. On self-report measures, children may select answers based on how they have been told they should feel rather than how they truly feel. This tendency in children is known as social desirability.

Respondents respond this way to avoid being judged negatively or criticized. Lack of comprehension or self-awareness may result in respondents guessing. Respondents cannot respond accurately to questions they do not understand. Also, young children may not be sufficiently introspective to know their attitudes. Finally, there is a tendency for respondents to select yes for all or almost all items on instruments which use yes and no response choices. To minimize the effect of biases, some instruments have an equal number of positively and negatively worded items (Piers, 1984; Henerson, Morris, & Fitz-Gibbon, 1987).

Self-report measures also may be distorted because of temporary illness, fatigue or the mood of the respondent. Also, distractions such as unusual outside noises or inconsistencies in the administration of the instrument may affect the responses on self-report measures. For a variety of

reasons, multiple measures such as clinical interviews and observations of students in a variety of settings should be used to corroborate such self-report measures as the Piers-Harris Children's Self-Concept Scale (Piers, 1984; Henerson, Morris, & Fitz-Gibbon, 1987).

School Climate

School climate is conceptually complex and vague. There is no standard definition of school climate. Recent attention to school culture has only added further confusion to the meaning of school climate. It has been suggested that school culture consists of shared assumptions, values, or norms, whereas, school climate consists of shared perceptions of behavior (Hoy, Tarter, & Bliss, 1990). According to Hoy and Tarter (1992), the climate of a school is the set of internal characteristics that distinguishes one school from another and influences the behavior of its members. In general, school climate refers to students' perceptions of their learning environment and teachers' perceptions of their work environment.

Climate has a major impact on organizational performance because it affects the motivation of individuals. The school climate will determine whether or not students show respect to each other and their teachers, feel valued, help each other, trust the adults in the school, and succeed in school. Also, the school climate will determine whether or not the teachers are respectful to

each other and their students, feel valued, exhibit fairness, help each other, care about their students, and seek results (Hoy & Clover, 1986).

The Jacox Elementary Student School Climate Survey revealed that overall 49 percent of the students rated the Jacox school climate as favorable. While 49 percent does not appear to be a high degree of favorability, it does represent a slight increase over the 1991-92 survey results. Any trend in a positive direction is desirable. As would be expected, the primary grade students rated the school climate more favorable than the upper grade students. The statements that received an overall average of 70 percent or higher favorability were 1) Teachers in this school treat students well, 2) The punishments for breaking school rules are the same for everybody, 3) The halls in Jacox look clean and nice to us, and 4) My classroom is clean and well-decorated. These statements express positive feelings about important areas of the school environment. The statements that received an overall average of 40 percent or below favorability were 1) Student behavior is not a problem at this school and 2) The bathrooms in Jacox are clean and nice to use. The principal confirmed that a great deal of her time during the 1992-93 school year was devoted to student discipline, sometimes at the expense of monitoring the instructional program. During the teacher interviews, several teachers mentioned that the students' bathrooms needed attention to make them nice to use (for example, stocking the students' bathrooms with paper towels and trash cans).

The school climate as perceived by teachers was measured using the National Association of Secondary School Principals Teacher School Climate Survey. The NASSP Teacher School Climate Survey asks teachers to indicate how they think most people in the organization feel about the school. The Jacox faculty rated three areas higher than the national means including the administration, the guidance program, and teacher/student relationships. During the teacher interviews, numerous positive comments were made regarding the administration of the school. In addition, several teachers commented that the students believed the teachers liked them this year (1992-93).

The two areas of most concern to teachers were student behavioral values and parent/community school relationships. Both areas were discussed during the teacher interviews. One teacher commented that if she could change one thing, it would be the way in which students treated each other. Several teachers commented on the need to increase parent involvement. Teachers commented on the need for parental involvement with such statements as, "Parental involvement is the number one concern," and "My kids' behavior and grades improved when the parents actually came in and sat ... helped out in the classroom."

The NASSP Teacher School Climate Survey was used because national norms were available to compare with the Jacox faculty ratings of school climate. Since the school was restaffed during the year under examination,

baseline data on school climate was not available. As mentioned previously, information gained from the teacher interviews supported the school climate ratings of the faculty. Further follow-up information may be desirable as the school improvement program is evaluated in future years.

Conclusions

Problems apparent in evaluation studies make it difficult to assess the complete accuracy of an evaluation study. For example, quantitative data does not always measure all of the effects of the program. Nevertheless, based only on the data presented in this study in relationship to the program goals, it can be concluded that:

1. The preponderance of evidence indicated that the Jacox Elementary School Improvement program did not meet its stated goals;
2. When certain assessment measures were used, students in some grade levels improved academically, specifically, students in Grades 3 and 4 made significant academic gains on the communication skills and mathematics criterion-referenced tests; students in Grade 4 made significant academic gains on the communication skills final report card grades when compared with third grade final report card grades for the same cohort group; and more students in the 1992-93 Grade 4 group passed the reading comprehension portion of the Virginia State Literacy Predictor Tests than the 1991-92 Grade 4 group;

3. There were no significant differences between the pretest and posttest means of the Piers-Harris Children's Self-Concept Scale which indicated that the program had relatively no effect upon student self-concept;
4. Both students and teachers reported an improvement in the climate of the school;
5. Teacher and student attendance improved over the previous academic year.

Recommendations

This research project was a descriptive study which dealt with a specific school improvement program. As a result of the findings in this study, it is apparent that evaluation studies of school improvement program goals are needed. Recommendations will be made in the three areas examined including student academic performance, the self-concept of students, and the school climate as perceived by students and teachers.

1. It is recommended that decision makers examine the instruments used to measure educational outcomes. Conventional tests are being criticized for being too narrow in their emphasis and incapable of revealing in any comprehensive way what students know and can do. Decision makers should explore multiple measures of student academic achievement such as alternate assessment, authentic assessment, and performance assessment. Good evaluation practices include the use of

a variety of data-gathering methods such as teacher observations, student projects, samples of student work, and student participation and performance as well as objective tests. This holistic view of assessment meshes with current instructional methods such as hands-on approaches in mathematics and science, writing across the curriculum, cooperative learning, authentic learning, problem solving, higher order questioning, developmentally appropriate practices, and active learning.

2. It is recommended that the program enhance its student self-concept component. Children advocates, particularly for poor children, believe that educators must coordinate their efforts with community services. Strategies to involve the community might include networking with religious and social organizations, health care programs, and businesses. Several ways in which the community organizations might assist with improving the self-concept of students would be to volunteer to help students in after school programs, tutoring programs, counseling programs, mentoring programs, and parental involvement programs. Emphasis should be placed on increasing parental involvement. Strategies to increase parental involvement may include offering a GED program at the school as well as other literacy workshops and inservices. The administration and teachers should seek assistance from church and community leaders to help increase parental involvement at the school. A systematic effort should be made to

strengthen the partnerships among the school, parents, and the community.

3. It is recommended that the program continue to address school climate as perceived by students, with particular emphasis on the upper elementary grade students. Elements of a positive school climate should be reviewed periodically to determine the degree to which they are perceived by students. Such school climate elements as respect, trust, morale, opportunity for input, achievement and social growth, cohesiveness, and caring should be integrated into the school environment.
4. It is recommended that the program continue to address the school climate as perceived by teachers. The two areas that appear to be of particular concern to the Jacox teachers are student behavioral values and parent/community school relationships. Committees with representation from all stakeholders can be formed to review these two areas of school climate. Regarding student behavioral values, students may be able to advise the administration and the teachers of ways that would improve students valuing each other, self-discipline, and internal motivation. Parents and other community representatives should be encouraged to offer suggestions on ways to increase use of the school building by these groups, volunteerism, attendance at school functions, and inclusion in the educational process.

5. It is recommended that the school division establish a feedback component to the Jacox Elementary School Improvement program. The purpose of the feedback component will be to offer the Jacox Elementary School administration and faculty opportunities to express to decision makers in the central office their needs and concerns. This feedback can be used to make adjustments in the allocation of resources including materials and personnel. The ongoing feedback and adjustment processes will strengthen the program and will help to ensure the maximal success of the interventions.

Evaluator's Annotations

Using quantitative data, the Jacox Elementary School Improvement program did not meet all of its stated goals; however, one academic year of implementation is not sufficient to determine the benefits of major program changes. The first year of implementation is a beginning for the change process and the movement toward attainment of program goals. Full accomplishment of program goals may be unrealistic to expect in a one academic year span of time. The Jacox faculty may want to review the program goals in light of the research findings. A review of the goals may result in some of the goals being changed, modified, or eliminated.

Another aspect of the study included use of qualitative methods in the form of teacher interviews. Caution should be used when interpreting the

interview findings. Selection of teachers for the interviews was based on the teachers volunteering to participate. Research indicates that volunteers may express more positive views than nonvolunteers. In addition the interviews were audiotaped to assist with the transcription process. Research indicates that data collected by means of audio recorders might be reactive measures, that is the measures have the potential for changing what is being measured because they are not a regular part of the environment. Even with the potential threats to reliability, the responses from teachers should be considered as potentially helpful information in the program evaluation study.

During the interviews, teachers expressed reasons why they enjoy working at Jacox Elementary School as part of the Jacox Elementary School Improvement program. Four of the main reasons included the administration, the faculty, the air-conditioned building, and the school climate. Teachers made comments about each of these reasons for job satisfaction such as,

...I feel comfortable with the administrators. I feel they value me and I value them greatly. I love their accessibility...

...One of the pluses for me truly has been working with the principal. Her values, her instincts, her choices are compatible with mine and who could ask for anything more...

...I love how the faculty holds together. I mean, you can ask anything of anyone and they'll come through for you. They are there for advice, for help...I mean, you can go to a faculty meeting and you can just feel it. The faculty works together.

...The staff I have found is very energetic. Everyone here whom I have dealt with is very positive. I don't hear a lot of negative things towards kids...When the kids come down the hallway in the morning, it is nice to

hear good morning from the teachers and the students. I have had a lot of help from experienced teachers...I have had a lot of support and advice...

...The building itself is comfortable because it has air-conditioning...

...I think the (school) climate here is relaxed, supportive, friendly, especially among the staff here. If there's a day of particular concern, we listen to each other. Time is taken by the administration to have parent and staff conferences all the time. We're in the hallways talking, we greet each other. So on a whole, we have the support and the friendship and good working relationships...

...It's an environment where you feel welcome. As soon as you walk into the building, you feel welcome. You are greeted in the morning by the faculty and staff...

While teachers were generally positive about their working conditions at Jacox Elementary School, they did express some areas where changes could be made. The three areas most frequently mentioned included 1) keeping current with building repairs, 2) increasing the number of computers within the school and for classroom use, and 3) increasing the amount of supplies available to teachers. A summary of teachers' responses regarding suggested changes is presented in Appendix D.

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APPENDIX A
RESTRUCTURING RATIONALE

Restructuring Rationale

Why Was Jacox Elementary School Selected?

During the summer of 1992, Norfolk Public Schools implemented a multiple intervention school improvement program at one of its elementary schools, Jacox Elementary School. Why did the school division select Jacox for the program? Why were such drastic measures taken? What were the theoretical underpinnings for the interventions? To answer these questions, a brief historical description of the conditions of the school will be given.

Jacox Elementary School has had its share of ups and downs for a number of years. In January 1991, the principal (hereinafter "Principal A") of Jacox was transferred to the department of transportation for what the school district called "unsatisfactory performance." His career included working in the capacity of a principal for 15 years. On May 14, 1992, following due process hearings, Principal A was fired by the school division. A school spokesman said that he was the first principal to be fired for poor administration in 20 years. The school division cited 18 deficiencies in his performance as principal. A school board member confirmed that the School Board voted 4-3 against him after a two-day hearing (Ho, 1992).

Principal A pointed to an incident on May 24, 1990, which he said led to his eventual firing. According to Principal A, while he was out of the school for a conference, a student who had hit and kicked a teacher was sent to the

principal's designee for disciplinary action. The designee indicated in a letter to the central office that she was also kicked by the student. In a statement describing the incident, the designee stated that she whacked the student's buttocks with a yardstick two or three times. Principal A wrote a letter of reprimand to the designee because corporal punishment was made illegal in schools a year earlier. The Jacox guidance counselor did not think that the letter was harsh enough. She called social services, alleging the incident was child abuse (Ho, 1992).

Child Protective Services and the school division spent several days investigating the spanking and other alleged instances of physical and emotional abuse by the designee. They concluded that the child abuse charge was unfounded. While studying the corporal punishment case, the school division also began looking into other problems at the school. They discovered tensions between a few employees and felt Principal A failed to properly supervise his staff. On August 20, 1990, Principal A was placed on a plan of action, the equivalent of probation (Ho, 1992).

The August 20, 1990, letter to Principal A from the assistant superintendent of elementary schools stated that he failed to report child abuse and allowed and condoned corporal punishment to be administered over a period of time. Several teachers at the school commented that he was overly accepting of people and allowed some teachers to slack off. The Education

Association of Norfolk indicated that few, if any, teacher complaints about Principal A ever reached the teacher association (Ho, 1992).

In January 1991, an assistant principal was appointed acting principal of Jacox. During her time as acting principal (hereinafter "Principal B") (1/91 to 6/92), the Education Association of Norfolk received numerous complaints from teachers (Ho, 1992). Several teachers were placed on plans of action for unsatisfactory performance. Additionally, several employees received letters of reprimand for not adhering to the school division's rules and regulations. Clearly Principal B was appointed to serve as a change agent. For the staff, her actions may have been too much too fast. In July 1992, Principal B was reassigned to another school in the school division.

In June 1992, a permanent principal was appointed to Jacox. The local newspaper ran a story on this appointment. The headline read, "School needed big changes, and principal made plenty."

Last year, Jacox Elementary School was suffering from low parent participation, discipline problems, rampant teacher transfer requests and the lowest test scores in the city. The school system brought in a new principal, four-fifths of the teachers were replaced... Regular visitors say things have changed for the better. A volunteer with a grandson in first grade said that last year she did not feel appreciated. She went on to say that from day one with the new principal, everyone welcomed her. The volunteer also stated that the new principal is a lot friendlier than the other principal (Ho, 1993).

APPENDIX B
DESCRIPTION OF THE PROGRAM

Description of the Program

The Jacox Elementary School Improvement program is a multiple intervention school improvement program designed to 1) improve student academic achievement, 2) positively influence the self-concept of students, and 3) improve the school climate. A full description of the program will require examining the organizational structure, curriculum, instructional materials, instruction, staff development, leadership, teacher selection, teacher incentives, school philosophy, student assessment, and student discipline.

Organization

In the Norfolk Public Schools district, teachers are allocated to each school based on student enrollment figures. The department of research and testing provides a projection of student enrollment in May for the following school year. Adjustments are made based on actual student enrollment in September on or about the tenth day of school. As long as state guidelines regarding pupil/teacher ratio are followed, principals may determine the organizational structure for their schools. Traditionally at the elementary schools in Norfolk, teachers and students have been assigned by grade levels. When asked why a traditional organizational structure for assigning teachers at Jacox was used for the 1992-93 school year, the principal responded,

The traditional prekindergarten through fifth grade teacher assignment is what teachers are most comfortable with and because I did not know

the teachers, because I had not actually had a chance to work with the teachers and to plan with them an alternative organizational structure, I would not take it upon myself to rearrange and make a different organizational structure other than what the teachers were comfortable with. Also, our district has a traditional grade level specific curriculum with grade level promotion standards tied to that curriculum. I think it would be very difficult to move away from that.

When asked to describe how teacher assignments were made, the principal responded,

Along with personnel, I looked at teacher certification and stayed within that certification. Within that band of certification, for instance NK-4, I asked teachers or it came out naturally as a part of the interview, what their grade level preference was. At the end of the structured interviews, as I worked with the personnel coordinator to choose teachers, I kept a written roster where I slotted teachers in so I knew what openings I had. I tried to honor teachers' requests for grade levels keeping in mind that they would go up or down with their students (in a two year loop), and I just filled the slots that I knew I had which was five teachers at each grade level kindergarten through fifth and three at prekindergarten. So it was almost a process of elimination. (As teachers were selected) I gave teachers their choices (if the slots at a particular grade level filled up or if only a few slots were left) then I would offer them (the teachers selected) the openings I had left. For instance, if they (a teacher) wanted kindergarten, but were willing to go up (with her students) and we had a first grade opening, then we'd offer them that opening.

As part of the organizational structure of a school, students are assigned to teachers. When asked to describe how students were assigned to classes, the principal responded,

This was inherited by me. When I arrived at Jacox, class lists had already been made for the coming school year and, of course, promotion to the grade levels had already been decided. The system (of assigning students) I inherited followed the promotion guidelines (set by the department of instruction) and classroom assignments had already been made. I did not choose to redo those classroom

assignments because I did not know the students and felt that it would have been a hap hazard reassignment.

Key points: The organizational structure for the 1992-93 school year was based on a traditional model of assigning teachers and students by grade level, prekindergarten through fifth. Whenever possible, the principal allowed teachers to select their grade level preferences. Students had been assigned by the previous administration and staff, and no changes were made after the restructuring.

Curriculum

Norfolk Public Schools' curriculum at the elementary school level is standardized. Curriculum guides are provided to teachers in the areas of communication skills, math, social studies, science, multicultural education, and guidance. Resource teachers have their own curriculum guides (i.e. art, music, physical education). The regular classroom teacher is expected to integrate the curriculum across subject areas based around themes.

Suggested themes are provided by the department of instruction, but flexibility based on students' interests, teachers' strengths, and schoolhouse uniqueness is encouraged. When asked about the curriculum, the principal responded,

I encourage them (the teachers) to be driven by the Norfolk Public Schools' curriculum. On planning day, the first thing they (the teachers) do is open up all the curriculum guides, lay them out and make sure they know what objectives they are responsible for teaching and the curriculum that nine weeks. Then they talk about themes. What themes they want to teach and which of these objectives they can weave

together and do some integrated curriculum and some thematic teaching.

When asked to describe the guidelines or parameters set by the administration regarding the curriculum to be taught, a fifth grade teacher responded,

Basically just the curriculum guides. And then you go on what works best for you and what works best for your students. We were told to look at the objectives and get the objectives taught according to your style and according to the children's styles and according to how they come together.

When asked the same question regarding the curriculum, one first grade teacher responded,

I like the fact that I'm allowed to take that curriculum and stretch things as far as I need to stretch them. As long as I'm covering the objectives and the materials, you know, the skills that ... and the objectives that I'm supposed to teach, nobody's dictating how I'm supposed to do it. So I can use my creativity and find as many resources as I can find and just do it my way. And that's exciting for me. I wouldn't be able to work here if I couldn't do that.

Key points: Norfolk Public Schools' teachers use a standardized curriculum to provide a framework for learning outcomes. The principal encouraged teachers to use the curriculum guides. Teachers were aware that they must cover the objectives outlined in the curriculum guides for each nine weeks. Teachers felt they were given freedom to teach the curriculum in a variety of ways.

Planning

At the beginning of each nine week grading period, the principal at Jacox Elementary School scheduled a planning day for each grade level. Over the course of a week, each grade level was given a day to plan as a team. Resource teachers (i.e. art, music, physical education, and guidance) provided back-to-back resources that day so that teachers could meet in the media center (library) to plan. When asked to describe the planning day, the principal responded,

We have each nine weeks what we call resource planning day. It is called resource planning day because the resource teachers are teaching the students at a particular grade level in kind of a round robin fashion that we have a very elaborate memo and schedule that goes out each nine weeks so that the grade level teachers can spend a day in the (school) library planning together long range planning. The first thing they do is open up all the curriculum guides (communication skills, math, science, social studies, and multicultural education), lay them out and make sure they know what objectives they are responsible for teaching and the curriculum that nine weeks. Then they talk about themes. What themes they want to teach and which of these objectives they can weave together and do some integrated curriculum and some thematic teaching. I would love to tell you that every classroom, every grade level has a finished thematic unit that they are teaching from for the whole nine weeks, but it takes much too much work for us to have accomplished that in our first year together; but I feel that if we continue working together, planning together, sharing resources, referring the curriculum, ordering materials that support the thematic units, that eventually, that this will evolve and it won't be quite as painful as it would be to try to sit down and write a good, appropriate thematic unit all at one time.

When asked to describe a planning session, one first grade teacher responded,

We have a first grade planning team of five teachers. We meet prior to the beginning of each nine weeks. We look at the curriculum and talk about what our children are interested in. We determine what our students' interests are by talking to them a lot. We have a lot of conversations in our classrooms. Sometimes in reading a piece of literature, they (the students) show a lot of interest in a particular subject or they have a lot of questions about something. So we find out through conversation, through literature that we read, the questions they have, and what things they talk about. Then the team of teachers decides on either one or more thematic units for that nine weeks. Usually it's more than one in first grade or sometimes it's something broad and we break it down into smaller units. In deciding on a thematic unit, we just kinda sit and talk about it until everybody starts saying, "Yeah, that's a really good idea." Our planning is not down to the detail. What we do is come up with our focus and we brainstorm lots of strategies to teach that particular unit. We try to find a lot of literature that we can use. Then each teacher really does the final planning for her particular classroom on her own. Some teachers have a little different style and they just have to make the unit fit their needs too, but we all are covering the same themes, and the same materials, and the same skills that nine weeks. We're required to use the curriculum guides, but nobody's ever said that first grade's doing these themes for this year.

Once each grade level had an opportunity to plan as a team for a nine week period, teachers prepared their own daily and weekly plans based on the thematic units. Several teachers indicated that they planned weekly with other teachers on their grade level. One fifth grade teacher explained how she planned with another teacher,

I team teach with another teacher. We go through a week and set some goals for the week, a month, and so on. For instance, she will do the social studies and I will do the math. We switch plans. We will get together and say, "Well, let's connect our math with our social studies, or let's integrate our writing lesson and our social studies." We plan either in the morning, afternoon, or on weekends. We will get together and we will plan, or on the phone for a couple hours on Sunday.

When asked about the level of lesson plans she expected from her teachers, Jacox's principal said,

I definitely expect daily written plans. I expect plans that refer to their nine-week unit plan. I don't see a need for them (the teachers) to write the same objective in long hand every time they teach that objective, if they refer to it or keep their nine-week plan clipped right in their plan book. I expect their plans to be on their desks and open when I go into the classroom. I expect that when I glance at the plans, that I can determine that they have enough planned to last the whole day. I expect their plans to be continuous for the year. I don't expect to see one page of lessons plans. (Instead) I expect to be able to flip back through and see last week and the week before and even several months before. I ask teachers to keep their year's plans together. I allow teachers to choose their (lesson plan) format. I supply lesson plan books, but they don't have to use them. If they are more comfortable using another system, that's all right as long as I can see from their written daily plans that they have prepared for those students.

Key points: During the 1992-93 school year, teachers were given release time every nine weeks to plan. The planning took place in the school library.

Grade level teams came together to share ideas and develop thematic units.

Teachers were on their own to plan weekly, however, many teachers will planned with one or more other teachers after school, on weekends, and by phone. The principal expected written lesson plans to be easily accessible to her when she observed in the classroom. She allowed for flexibility and individual preference with regard to lesson plan format.

Instructional Materials

Since curriculum guides were used to focus the instructional program, instructional materials supplied by the school district or purchased with building

level funds were used as resources. The thematic units developed at each nine-week grade level planning session determined the instructional materials that were needed. A basal reading series was available for grades kindergarten through third; however, it was considered one resource. Other instructional materials for grades kindergarten through fifth included multiple copies of trade books, textbooks in each subject area, language arts resource books (teacher's edition only), big books, phonograph records, poetry charts, computers, an IBM Writing to Read laboratory, videotapes, film strips, classroom televisions, and manipulatives for math, science, and social studies. Additional audiovisual materials were available through the school media center as well as a districtwide media center. When asked about instructional materials, one fourth grade teacher commented,

Of course, we have plenty of textbooks. There aren't enough hands-on activities for science. Those supplies I had to come up with myself. Unfortunately, I didn't have enough for each kid to do his own experiment. Usually it was me doing the experiment and them (the students) participating in it.

When asked the same question, a fifth grade teacher made similar comments,

...More equipment for the children. More mathematical hands-on things would be wonderful. We're doing things now and we have to plan them around other teachers because we have to share equipment back and forth. So if we had enough equipment for the children. If we had computers in our room...we have one. We have two at our grade level actually and one that even has printing capabilities with a hard drive on it. If we had more of those things for our children to work on in the classroom, hands-on, you know, to do more writing and more publishing of the things that they do, would be helpful.

Key points: Instructional materials were purchased by the central office for the schools, however, individual schools purchased additional materials. At Jacox teachers believed that textbooks were plentiful, but more hands-on materials were needed for science and math. Also, teachers saw a need for more computers with printers to be used by students for writing and publishing.

Instruction

At Jacox Elementary School, the principal expected the teachers to present the curriculum in a way that allowed the students to be actively involved in the lesson. When asked to explain what she expected to see when she observed in a classroom, the principal stated,

When I enter a classroom, I expect to see teachers actively engaged with their students. I also expect to see teachers directing lessons that are active. I expect to see the learners actively involved as well as the teachers. The students at Jacox have a very high activity level. If the teachers are going to really keep them engaged, then I think after the input, after teachers have shared with them the concepts that are being taught, that students need to be actively involved. When I walk into a classroom, I don't expect that every child would be working independently on the same activity. I expect that some children may be able to do an activity independently, others may need a tutor or a peer to assist them with the activity. I also expect to see teachers allowing students to work in positions that are comfortable for them. I think you have to take these individual learners into consideration. Children need to be allowed to talk as they work. The learners need to be able to use manipulatives. The teacher should take into account where the child is in his developmental level as well as the need that he has for learning.

When asked to describe the instructional strategies that worked best for her, a fifth grade teacher responded,

...the biggest thing is what is going to keep their interest and something that's going to keep them busy. At first, I tried to do a lot of open group type of things and they just couldn't handle it. I have a lot of students that want to talk all the time. So I need to find things that they can either discuss among themselves or I can have a small group going while I'm going with a small group or to have hands-on things that they can work on and talk about with somebody else or work with somebody else. Those types of things. How they're going to be able to handle what they're doing is what I look at first. So whatever I'm trying to do in reading or writing or math, I try to make it those kinds of activities.

When asked to describe her instructional program, a fourth grade teacher responded,

I think that the principal is very liberal in the respect of letting teachers have their own individual styles, and do their own individual things. Teachers do lots of different things. I think most of the teachers here are very hands-on, whole language-oriented. I mean, everything is very involving the kids. I think that's a big change from the way it used to be which was more directed, sit down seat work.

Key points: The principal wanted to see students actively involved in the learning. She wanted teachers to be actively involved with the students. She wanted to see hands-on activities with students using manipulatives. She believed students needed to be able to talk while they worked. Also, the principal believed that students should be allowed to get into comfortable positions such as on the carpet or floor. She allowed teachers a great deal of latitude in their teaching styles and instructional approaches.

Staff Development

In the Task Force Report for Improving Academic Achievement in Community Schools (1992), suggestions were made regarding staff

development. The Jacox Elementary School Chapter 1 budget allocated \$2,200 for staff development. The Task Force Report suggested that staff training be provided 1) in preparation for implementation of a developmentally appropriate early childhood program, 2) in the area of sensitivity training to ensure positive attitudes of teachers and administrators for the enhancement of academic achievement, and 3) in the area of behavior management. In addition, the Report called for the development and implementation of programs on self-esteem, cultural awareness, ethnicity, social skills, and the whole language philosophy with appropriate teaching strategies. A week prior to the date that all Norfolk Public Schools' teachers were scheduled to report to work, the Jacox teachers attended four half-day workshops designed to address the recommendations of the Task Force Report as well as some areas of importance to the principal. When asked to describe the staff development provided prior to school starting, the principal responded,

The impetus behind the week of inservice was that funds had been provided to pay teachers to attend inservice for the school being restaffed. This was part of the Task Force Report on the community schools for restructuring and restaffing. I met with a representative from the department of instruction and a representative from staff development and we brainstormed resources and topics. I was basically allowed to design the week of inservice and the two representatives helped pull it together. We looked at the amount of money, we looked at the number of teachers, and we decided that we could afford to pay teachers for four half-days. I went to Price Club and bought food, coffee, and juice. I arrived at 8:00 a.m. each morning and set up the refreshments. Teachers were actually paid from 8:30 a.m. to 12:30 p.m. The topics included "Sensitivity to the Urban Learner," "Developmentally Appropriate Practices and Strategies," "Thematic Unit Planning," and "Classroom Management." I presented Tribes to my staff the same day

classroom management was offered because it was a philosophy that I felt had some implications for our staff....The classroom management inservice was expanded and offered to the teachers through staff development funds for credit. Another principal and I worked up a schedule so that it didn't conflict with school activities. We flipped flopped from week to week at the two schools. Probably 75% of my staff took advantage of the classroom management program.

When asked if feedback from the four half-day inservices indicated that they were beneficial to teachers, the principal responded,

I think teachers came in so quickly and started to work so quickly that I'm not sure I remember specifically teachers saying that they loved the inservice or they loved the topics, but I know for a fact that it was good for my staff because this is how they all met. This is actually when they came together, when they started working together....It did have an impact because of the behavior management planning. Also, the first week of school when all teachers were here, we picked right up on the beginning of the thematic unit planning....So I think the fact that the topics were extremely relevant to our philosophy, that the topics were practical, and we applied them as soon as we came into the building. I think that speaks to the effectiveness...

When asked to reflect on the four half-day inservices, one fourth grade teacher responded,

The topic that I thought was most beneficial was when we did a lot of thematic unit planning....The whole week was valuable in itself in that especially being a restaffed school, everybody being able to get together and start working together prior to school opening, getting to know each other, working with your team. The thematic unit planning that really gave us some time to actually get a feel for each other. Working together as a team was new to a lot of people and that just gave us a good beginning...

When asked how she planned to utilize the remaining 1992-93 Chapter 1 funds for staff development, the principal responded,

Probably 20 teachers will be allowed to attend one day workshops in the area or as far away as Richmond (VA). As interesting topics come up

or are presented through the department of staff development, or come across my desk through the mail, I will say to each grade level that it was appropriate for, you may send a representative. We will pay their registration, we will pay for a substitute teacher, out of our Chapter 1 funds. They will then go and bring the information back to their grade level. We will send twelve teachers to the Virginia State Reading Conference which will be held in the area. I try to be very diligent about putting on the message board in the main office for teachers all the staff development activities...that staff development offers to Norfolk Public Schools' teachers at no charge....I will leave it up to the grade level to decide who will get to go because surely on a grade level if there are five of us sitting there and two people have been somewhere and there's a third opportunity, then surely the three people who haven't been anywhere are going to say, but you went to that, I want to go to this. At this time, I plan to pay for the conference or workshop....Some come across my desk that are too expensive or that require too much travel....The average cost of the workshop will be \$100 per teacher....Every Friday will be reserved for grade level meetings for teachers to share ideas. The way I will monitor that is they will turn their minutes into me so that I can read the minutes of the meetings so that I can keep up with their discussions. So the responsibility after attending a workshop is to share your information with others.

When asked about staff development at the school, one first grade teacher responded,

We have a lot of opportunities for staff development. I mean, if I see a great conference in a newsletter, I know that I may not get to go, but I'm free to go in (to the principal) and ask to go without somebody telling me I was crazy, you know. I see a lot of fairness in that. Nobody goes to two (conferences or workshops) before everybody's had a chance to go to one. Even brand new teachers. I think that makes teachers feel good too. That everybody is recognized and you don't have to be around...even new teachers don't have to be here a while to get an opportunity to be involved in things and I think that's gonna be really nice in making them happy to be here...

Key points: Money was set aside in the school budget for staff development.

Teachers felt free to ask to attend conferences and workshops. The principal expected grade level teams to work it out among themselves as to who would

attend the conference or workshop. It was the responsibility of the participants to bring back the information from the conference or workshop and share it with other staff members.

Leadership

The Principal

In June 1992, appropriate central office personnel appointed a new building administrator to Jacox Elementary School. This white, 42-year-old female administrator had served as an assistant principal in the school division for six years. Prior to assuming her duties at Jacox Elementary School, her most recent assignment included serving as an acting principal at a school piloting the division's site-based management model. The assistant superintendent of elementary schools recommended the administrator for the Jacox principalship because of her leadership skills and past performance handling challenging situations. When asked to describe her leadership style, the principal responded,

I guess we've all studied leadership styles and we've all taken inventories and placed ourselves on continuums. I think the leadership style that I've read about, that I thought the most of, that I thought as my style, that I thought really was most appropriate for school, where you're leading a group of professionals, I think that's what makes school organizations different from so many other organizations is that you are working with a group of professionals, not workers. I don't see teachers as workers. I see them as professionals who are leaders, who are in charge of their own classrooms. Transformational leadership style speaks about sharing power, about having shared goals. It speaks about sharing decision making. It talks about everyone working together

for a common goal and I think that's the kind of leadership that schools need.

When asked to describe the principal as a leader, one resource teacher responded,

Sharon (the principal) operates with the kids in mind always....There are so many issues that come up all day long that can cloud your perception of what really is important. Sharon has the capacity to work through all the issues that come to her with the overriding perception of what is most important and what comes first. She also is a what I see is a risk taker. She has done some things in program that I might have been afraid to do with this population, and yet, it seems that her attitude is let's try, let's see what happens...if it falls flat on it's face, so be it. And many times it hasn't. It might not have been the best reaction that you wanted from the population of children, but they experienced whatever it was, whether it was an assembly or a special day, special privilege or special meaning to certain days. I remember when an author came in. I was very worried about the day because there was an awful lot going on and sometimes if there are changes for these kids in schedule and what not, they get more upset and then can start acting out. She had an author speaking with these children for a long time in the library. I was worried about the length of time. Perhaps it was long, but the children really benefited and they did stay with it. Then suddenly over the loud speaker system came, "Teachers, if you want an autographed copy of a book, come into the teacher's lunchroom. Find another teacher to take over your class for a few minutes so that you can get away to do that." I said to myself, "Oh my Lord, now they're gonna have another person in their classroom after all that's been going on in the morning." And it worked out. That's a kind of nondirected attitude there too. You teachers find a way and it will be okay. It produces its own incentive. It might be slower in the production of it rather than somebody saying now do this and do that and this is the way we're gonna set up this day, but she does leave it to others as she often does to make their own best decisions, with their own best energy. It really is better in the long run.

The Assistant Principal

The assistant principal, also a white, 42-year-old female, remained on the staff from the previous administration. The assistant superintendent for elementary schools had received numerous compliments from parents and community members regarding the assistant principal. During the previous academic year, 1991-92, the assistant principal had served as a community liaison. In this capacity, the assistant principal had attended several civic league meetings at which she met members of the community. Additionally, with most of the staff being new to the building, the assistant superintendent for elementary schools felt that retaining the assistant principal would provide a familiar face to parents and students. When asked to describe how she utilized the assistant principal, the principal responded,

Sometimes I think I use her too much. I believe in more like a co-principal than I'm the principal. I think that I share responsibility to her. I hope I share authority with her. I hope I share the glory with her as well. I really see her as being a co-principal and having as much authority as I do, although of course, ultimately I have the responsibility. We often laugh about that when I tell her, you know, you can make that decision. She says, "Yeah, I know, and I love it, because if it's not right, you're the one who is going to have to take the heat." But I'm very, very fortunate to have a very, very competent assistant principal who shares the same philosophies I do and I think that's so important. If she were very autocratic, then I think we'd have a real problem; or if she had the style that she felt like she, as assistant principal, was on a plane higher than teachers and I think that happens sometimes when you're promoted. Your status, your personal status is promoted and I don't think that's true. I think when you're promoted, you assume more responsibility as opposed to having been elevated from the level of work.

When asked to describe the assistant principal, one resource teacher commented,

I really feel comfortable with Sharon (the principal) and Lillian (the assistant principal). I feel they value me and I value them greatly. I love their accessibility. I know they work, work, work, work. But I've never had that feeling of, I just can't get through to them....I really feel good about their accessibility and that matters to me. I know they value me. One thing, I report to Sharon every week what I've done the week before. I have a form that I use so she knows everything I'm doing. And often times at the bottom, you know, it will just say, "great work" or "we couldn't get along without you." That means all the world to me.... Lillian, the same thing. She'll say, "We really appreciate what you're doing." And I know she does.

Key points: The principal encouraged the teachers to be creative in an atmosphere of cooperation, collaboration, trust, risk-taking and idea sharing.

The principal and assistant principal shared the same philosophy. The principal saw the assistant principal as a co-principal. She was willing to share authority and decision making. They were both accessible, supportive, and expressed to teachers how much they were appreciated.

Teacher Selection

During the summer of 1992, the school division declared all instructional positions vacant. Even the former teachers were required to apply for a position at the school. The application process was open to current teachers within the system as well as teacher applicants. Along with a formal application, all teachers applying had to submit a writing sample. This specimen was to be used to evaluate the applicants' written communication

skills. Every teacher within the school division had an opportunity to apply, and all who applied were interviewed. Teacher applicants outside the school division were screened using standard procedures by the appropriate personnel coordinator. These applicants were invited to interview for positions at Jacox. The staffing of Jacox Elementary School took precedence over all other staffing, therefore, a large pool of teacher applicants were interested in interviewing for the Jacox Elementary School Improvement program.

The interviews were conducted by a panel composed of representatives from the following central office departments: personnel, instruction, and special projects as well as the building principal and assistant principal. An instructional specialist served on the panel to represent classroom teachers. Each interview lasted between thirty and forty minutes. The interviews were structured so that each candidate answered the same questions as did the rest. Questions were developed by the department of instruction and the building principal, and were screened by the department of personnel. "Listen fors" were provided to the interviewers to maximize consistency in the rating process. While panel members provided input and made recommendations, the principal had the final word in the selection process. The principal, as instructional leader, selected a staff that she felt could make a difference in the lives of the students at Jacox Elementary School.

Teachers on the Jacox Elementary School staff not selected to stay at Jacox or opting to transfer out of the school were administratively reassigned

to other elementary schools. Assignments were made based on the recommendations of the assistant superintendent for elementary schools. Traditionally, administrative reassignments of teachers are unpopular with principals because they do not have a voice in the decision. During and after this reassignment process, the receiving principals voiced displeasure to the assistant superintendent of elementary schools. One of the major reasons for the concerns centered around the fact that there were so many teachers involved in the reassignments. Several teachers were asked why they accepted a position at Jacox. The responses varied,

Honestly, first of all, I needed a job. I was fresh out of college, I needed a job. Then, this is something that I've always wanted to do. I see these children in the school, especially children that I am teaching, prekindergarten, I see them as the ones who will make a difference in the future. I'm trying to do as much as I can to get them on the right track and to help them stay on the right track (a prekindergarten teacher).

I felt very comfortable at Jacox. I felt that this population especially needed someone that really cared, would take the time to visit them, get on their level, have someone that they could relate to especially the parents because in talking to the parents, they seem to feel uncomfortable with the teachers in the past. They feel like the teachers are on one educational level, they're on another. So I feel very comfortable dealing with the parents on whatever level. I noticed that the parents this year feel very comfortable dealing with the teachers. I think that relationship is so important in reaching the students. I feel that to be honest with you, I am a black female and my population here is a total black population. We're dealing with a lot of behavior problems. I feel that I can just give something back to the community. I know that there are other schools that would probably be easier to work in and I know that this will take a lot more out of me, but I feel a great reward because I'm giving something back. I feel like I have something to give back (a third grade teacher).

First of all, I wanted to work in a community school because I feel like I have a knack with working with children that have special needs. I'm more patient with children that have special needs. Besides that, they were inner-city children and I really wanted to work with these children to see if I could make a difference. I feel like if now I get them right at the beginning, I can make more of an impact on them as time goes along and maybe follow them for two grades so there will be much more of an impact on them. I feel like this is where I need to be with children that really need special help (a second grade teacher).

Key points: A screening process was used to select the staff for Jacox

Elementary School. While she had input from various sources, the principal made the final decisions in the teacher selection process. Teachers accepted positions at Jacox for various reasons such as 1) because they needed a job, 2) to give back to the community, and 3) to contribute to the lives of children with special needs.

Teacher Incentives

Several teacher incentives were given to full-time contract teachers at Jacox. These incentives were used to attract the best teachers for the vacancies at Jacox. Classroom teachers were promised a lower pupil-teacher ratio than would be found at other elementary schools. Typical class size at other elementary schools range from 25 to 29. The teachers at Jacox were offered a pupil-teacher ratio of 20-to-1 in grades kindergarten through second and 23-to-1 in grades third through fifth. In addition, each teacher was given a "no strings attached" \$1,000 stipend for teaching at the school. It was hoped that class size and the \$1,000 stipend would serve as incentives to attract

strong, conscientious, and dedicated teachers. Regarding class size and the stipend, teachers responded,

(Class Size)

My class size is smaller. My first year here (at Jacox) I had 32 children in second grade the entire year. It didn't matter how many cries for help I made in saying, I can't deal with this many children, nothing changed. This year, my class size is 23 which is a little bit higher than most...they're around 20 to 23. Most grade levels, they are even lower than that. Small class size has been helpful because the children have so many different needs. In my first grade class, I have children who are just beginning to read and I have one little boy who can read on fifth grade level. To meet their needs and keep everybody productive and keep everybody excited about learning takes a lot of time and you can't do that but with so many children. When you start spreading yourself out really thin, you can't even plan for that many children (a first grade teacher).

(The Stipend)

There are different factors that I had to consider. I think because it was a new staff, I felt, well, gosh, there's this big interview process and, you know, I actually got selected. This is a really special thing to have been selected to come to this school and I think I'm going to be really passing up an opportunity if I don't take it. And realizing that there is going to be a lot of other new teachers going through the same thing that I'm going through. A lot of new programs....The stipend also helped.

Key points: Several teacher incentives were offered to teachers at Jacox such as lower pupil/teacher ratio and a \$1,000 stipend. Teachers felt the lower pupil/teacher ratio was important to the students and to the teachers' morale. The stipend was mentioned as being a consideration in whether to accept a position at Jacox.

School Philosophy

During the 1992-93 school year, the principal of Jacox wanted the faculty to develop a school philosophy. When asked to explain why she believed a school philosophy was important, the principal responded,

I feel that a school philosophy is important because as a team we all need to be heading in the same direction. I think that it is extremely important that the direction be very, very clear. Each activity, each strategy, each new program that comes into the school should be able to meet the test of the philosophy so that it (the program, activity, or strategy) is compatible. There are lots and lots of good ideas that we can use in the school, but we need to make sure that since there's only so much time, so much energy, so many resources that the resources, the time, and the energy are being spent on programs and activities that will meet the needs of the school and that the needs of the school have been stated in the philosophy.

The principal was asked to describe how she planned to facilitate the process needed to develop the school philosophy. She responded,

Early on in the school year, we will begin the process by talking about philosophy. I have already compiled, with looking at the interview questions used to select the school staff, a draft written by me, the assistant principal, and the instructional specialist as well as drafts of philosophies from other schools. I will present it that way and say to the teachers, "I am presenting a rough draft of the philosophy to you only because it is so hard to start with a blank sheet and begin to write. I will share with them philosophies from other schools also so they can see format as well as ideas. Then we will read all this together. Then we will break into grade level groups and spend the rest of that morning. They will be assigned the task of meeting again that next week on grade level planning day to go through and revise and edit and rewrite the philosophy on their grade level. They then will select a representative to go from their grade level to a meeting. This will be about two weeks later, with the assistant principal so that each grade level can bring their ideas to the table. They then basically will rewrite the philosophy. There will be a lot of changes from the rough draft to the final copy. I will not participate in the group where grade level representatives come back because I am afraid that no matter what I had to say that they

might feel that I had some ownership in the rough draft. They might be hesitant to make suggestions.

Key points: The principal felt a school philosophy was important. She wanted the faculty to have input into the school philosophy. The principal along with the assistant principal and instructional specialist drafted a philosophy to provide a framework for the teachers. The faculty examined sample philosophies from other schools. The assistant principal met with grade level representatives to draft, revise, and edit a school philosophy.

Student Assessment

The department of instruction, with approval from the superintendent and his cabinet, determined the promotion guidelines and standards for the Norfolk Public Schools. For the 1992-93 school year, the following standards were implemented:

Guidelines

Students in Kindergarten through Grade 5 will be promoted on the basis of meeting standards as indicated in mathematics and the communication skills curriculum guides. Exceptions may be made at the discretion of the administrative team and teachers with proper supportive documentation.

Standards

Kindergarten through Grade 2: Mathematics

Satisfactory completion of minimum grade level expectations in mathematics as indicated by: teacher documentation/records and seventy percent mastery of grade level objectives found in the mathematics curriculum guides.

Communication Skills

1) Proficiency in Reading as verified by the Student Reading Portfolio (Grades 1-2); each grade level has its own Reading Assessment which becomes part of a portfolio which follows the student from grade to grade. 2) Proficiency in Writing as verified by the Student Writing Portfolio (Kindergarten-2); each grade level has its own Writing Assessment which becomes part of a portfolio which follows the student from grade to grade. 3) Seventy percent mastery of grade level objectives found in the communication skills curriculum guide.

Grades third through fifth: Mathematics

Satisfactory completion of minimum grade level expectations in mathematics as indicated by: teacher documentation/records.

Satisfactory performance on the Mathematics Monitor Test (each grade level has a minimum standard).

Communication Skills

- 1) Proficiency in Reading as verified by the Student Reading Portfolio (each grade level has its own Reading Assessment which becomes part of a portfolio which follows the student from grade to grade).
- 2) Proficiency in Writing as verified by the Student Writing Portfolio (each grade level has its own Writing Assessment which becomes part of a portfolio which follows the student from grade to grade).
- 3) Seventy percent mastery of objectives on the yearly district-made criterion-referenced tests (each grade level has its own criterion-referenced test with its own minimum standard). When asked to describe her philosophy regarding the promotion guidelines and standards and what part teacher judgment played, the principal responded,

This is an issue that I think we will talk a lot about. I will tell teachers that each nine weeks they will revisit the curriculum, plan long range, include the objectives that are in the curriculum guides, and at the end of the school year, we will give the criterion-referenced tests that measure the children's achievement of those objectives. Then I will turn around and say to them, "However, use your own judgment. After you've looked at the child's progress each nine weeks, use that yardstick as you do the report cards. Did they earn an A, did they earn a B, did they earn a C, did they earn a D, did they earn an E." Now at the end of the year, I say to them, "Use your own judgment when you're deciding whether to promote or retain that child." Now if the child's made straight Es all year long, failed the criterion-referenced tests, they really have no choice but to retain that child. The question comes when you have a child who has worked diligently each day, done their best, is overcoming some tremendous odds at home, you've got to look at the scores you've given them on the Reading and Writing Portfolios, you know, have they been marginal, have they been proficient, and at some

point, the teacher has to make a judgment....We will look at each child as an individual mid-year, we will look at the children and where they are, if we think they are in danger of not meeting promotion standards. We will conference with each teacher about each child that is in danger and then try to make the best decision for that child....The standards say you only retain a child twice in elementary school. If you have a child who really is marginal and they were retained the year before, it certainly is not going to be to their advantage to be retained again. While we have specific standards and you can always use those to make your decision easier, we will try to go the extra yard or extra mile for the child and look at other factors and do what's best for the child.

Key points: Promotion guidelines and standards were determined by the department of instruction with approval from the superintendent and his cabinet. In Kindergarten through Grade 5, promotion standards were based on performance in mathematics and communication skills. The promotion standards allowed for teacher judgment. The principal of Jacox planned to monitor student progress mid-year, conference with each teacher regarding students in jeopardy of failing, and determine the best course of action for each student.

Student Discipline

The Norfolk Public School division sets guidelines for administrators to follow regarding suspension and expulsion of students from school; however, the daily practices used by teachers and administrators to handle student discipline is established at the building level. For a number of years, assertive discipline training has been offered through the office of human relations and staff development. Assertive discipline requires the teacher to be consistent in

dealing with student discipline. The assertive discipline system involves the teacher establishing a set of 4 or 5 classroom rules with rewards for students who follow the rules and consequences for students who break the rules. At Jacox Elementary School, the assertive discipline approach was explained to teachers prior to the first week of school. In addition, a semester-long course was offered on the topic for Jacox teachers through the office of human relations and staff development. When asked to discuss student discipline, the principal responded,

...Here at Jacox, when we do have discipline problem, we try to talk with the teacher. Of course, find out her side; talk with the student; and then try to help the child see another way he could have handled the situation, and then we try to make parent contact. Quite often we end up making a home visit or two or three or four during the day. It's not unusual depending on what kinds of problems we're dealing with for me to have five children buckled in the car and take them home. Not all of them on a suspension, not even necessarily on a written conduct notice, but just to talk with parents and let them know what's going on in the classroom and how the child is behaving and to ask for their cooperation and assistance. I usually get, I've been very pleased with the way the parents respond when I go to them. Not enough parents come to us. As long as the teacher has met certain requirements and has done everything in her power to work with that student, then at that point I assume responsibility for helping that child, removing that child, getting help for that child, so that the classroom environment can be a calm place....Hopefully by what I'm dealing with them teaching discipline and setting standards for the future. Talking with them about other ways to solve their problems....We now have an in-school suspension two days a week. We had it three days a week for a while and that was stretching our resources too thin, so we're back to two days a week. Where children sit with two adults; the classroom teacher prepares the work and we have a form for that in our little in-school suspension packet.

One fifth grade teacher expressed her frustrations regarding student discipline,

The hardest thing for me is the disrespect of the children. Some days I just can't believe how disrespectful they are. I have worked very hard to get their respect and I respect them, but on some days, they just don't understand. I have a really difficult time because they don't want to listen, or to think of a child actually shouting in your face, I mean, that's difficult for me...

A first grade teacher compared this year with previous years at Jacox,

...I have one child that I've done...I had a behavior plan in the classroom, I've used parental contact, I've made home visits, I've individualized instruction, I've referred him to the Student Services Team. He's been diagnosed Attention Deficit Disorder, but he still continues to have problems. There are days when he's so disruptive that I can't deal with him any more and I take him to the office. Somebody listens to me because they know what's going on in my classroom, they know what's going on in the school, and they have no doubt that I need some help with this child. And I get some help even if it's somebody taking him away from me for a little while so that I can get something going on in my classroom and then go back to dealing with him. Where in previous years when that happened, you didn't get that. You probably couldn't even get in to see an administrator if there was one even there. And that problem was yours alone, so that by the end of the day I went home many a day with raging headaches. Not that I wanted to give up, but you knew you needed some help and it wasn't there.

When asked about student discipline, a third grade teacher responded,

I try not to send children to the office. I try to avoid it. But when the need has been there, I suppose because I don't send very many they have supported me because they know that this means this has reached a serious situation. That I have gone through every channel that I can think of to get the child settled down to the point where we can work together. And they have either dealt with the child very strongly in the form of conduct notices, in-school suspension, out-of-school suspension or at least I've just asked that they talk to them because sometimes a word from them means more if the child's been hearing it from me and hasn't been listening. So they have always supported me in the sense that they back me up with the child and didn't question what my recommendations were.

Key Points: The Jacox teachers had a systematic classroom management plan (i.e., assertive discipline). Close communication was maintained with parents. Such communication included phone calls, notes home, home visits, and conferences. The administration supported the efforts of teachers to maintain orderly classrooms. Referrals to the office resulted in one of several actions: a lecture, a note home, a phone call home, a home visit, in-school suspension, or suspension from school. A follow-up meeting between the teacher and the administration was held that same day. Students with on-going behavior problems were referred to the Students Services Team for review.

APPENDIX C
ADDITIONAL DATA
&
STUDENT SCHOOL CLIMATE SURVEY

Summary of the Overall 1991-92 Survey Results for the Jacox Student School Climate Survey by Grade Level

Grade	N	Mean	SD	Variance	Standard Error
K	99	3.71	.69	.47	.07
1	64	3.69	.50	.25	.06
2	83	3.54	.59	.35	.06
3	80	3.05	.55	.30	.06
4	100	3.02	.70	.48	.07
5	72	2.88	.75	.56	.09

Summary of the Overall 1992-93 Survey Results for the Jacox Student School Climate Survey by Grade Level

Grade	N	Mean	SD	Variance	Standard Error
K	106	4.38	.64	.41	.06
1	88	4.06	.70	.49	.07
2	83	3.45	.67	.45	.07
3	80	3.35	.60	.36	.07
4	93	2.76	.73	.53	.08
5	84	2.76	.59	.35	.06

Summary of Item Response Frequency Distribution for All
Grades and All Teachers for the Jacox Student School Climate
1991-92 Survey Using Percentages

Item Number	N	Percent Nonfavorable	Percent Uncertain	Percent Favorable
1	498	22	17	61
2	496	14	13	73
3	482	24	20	56
4	479	58	21	21
5	477	30	20	50
6	474	38	25	37
7	470	19	11	70
8	477	33	26	41
9	472	31	21	48
10	464	18	15	67
11*	470	72	11	17
12*	464	66	14	20
13	473	31	17	52
14	472	33	20	47
15	461	35	17	48
16*	475	64	8	28
17	468	29	19	52
18	473	30	22	48
19	466	48	21	31
20	461	31	25	44
21	471	24	17	59
22	469	19	15	66
23	466	58	14	28
24	467	21	16	63
25	463	23	15	62
26	465	15	12	73
27	461	25	17	58
OVERALL		12	47	41

*Reverse Items

Summary of Item Response Frequency Distribution for All
Grades and All Teachers for the Jacox Student School Climate
1992-93 Survey Using Percentages

Item Number	N	Percent Nonfavorable	Percent Uncertain	Percent Favorable
1	533	24	14	62
2	530	10	13	77
3	529	22	11	67
4	525	49	14	37
5	527	33	14	53
6	530	34	19	47
7	522	19	11	70
8	526	30	20	50
9	528	32	16	52
10	528	21	14	65
11*	528	72	9	19
12*	526	65	12	23
13	526	29	12	59
14	529	26	14	60
15	525	32	15	53
16*	529	64	8	28
17	526	24	18	58
18	524	34	14	52
19	525	37	22	41
20	519	28	22	50
21	525	21	16	63
22	526	17	13	70
23	524	59	8	33
24	519	18	19	63
25	522	24	13	63
26	526	8	11	81
27	520	25	16	59
OVERALL		14	37	49

*Reversed Items

Directions for the Student Survey for
Jacox Elementary's Climate Correlate

Teachers:

The purpose of this STUDENT SURVEY is to measure the perceptions of our students regarding the school climate of Jacox. Grades 3, 4, and 5 will use standard bubble sheets for answers and Grades K, 1, and 2 will use consumable sheets. We will later have their responses transferred to bubble sheets for scanning by the computer.

PLEASE READ TO STUDENTS:

Children, the answers you will give on this survey will help the staff at Jacox School know what to pay attention to in order to make our school better.

(For Grades 3, 4, & 5)

Mark your answer under column A	if you agree strongly
B	if you agree
C	if you are unsure
D	if you disagree
E	if you disagree strongly

(For Grades K, 1, & 2)

Circle the smiling face if you feel that what I read is true.
Circle the straight face if you are not sure how you feel.
Circle the sad face if you feel that what I read is not true.

Teachers:

Please read the test for your students if you are in Grades K, 1, or 2. If you are in Grades 3, 4, or 5, decide whether the students in your room can successfully comprehend this survey by reading to themselves or if they need you to read to them. Our goal is to get a sample of their opinions.

Thank you for your help.

The Survey Committee
of the Climate Correlate

STUDENT SURVEY for
Jacox Elementary's Climate Correlate

1. STUDENTS ARE SAFE FROM PHYSICAL HARM IN THIS SCHOOL.
2. TEACHERS IN THIS SCHOOL TREAT STUDENTS WELL.
3. I THINK THIS IS A VERY GOOD SCHOOL.
4. STUDENT BEHAVIOR IS NOT A PROBLEM AT THIS SCHOOL.
5. THIS SCHOOL'S BUILDING AND GROUNDS ARE KEPT CLEAN.
6. STUDENTS IN THIS SCHOOL TREAT TEACHERS WELL.
7. THE PUNISHMENTS FOR BREAKING SCHOOL RULES ARE THE SAME FOR EVERYBODY.
8. STUDENTS AT JACOX TREAT TEACHERS NICELY.
9. MOST STUDENTS AT JACOX TREAT EACH OTHER NICELY.
10. EQUAL PUNISHMENT IS GIVEN TO STUDENTS FOR BREAKING RULES.
11. STUDENTS TALK OUT OF TURN A LOT IN CLASS.
12. STUDENTS GET OUT OF THEIR PLACES WITHOUT PERMISSION A LOT.
13. THERE ARE NOT MANY FIGHTS IN THE CLASSROOM AND I FEEL SAFE.
14. MOST OF THE TIME STUDENTS WALK QUIETLY IN THE HALL.
15. THERE ARE NOT MANY FIGHTS IN THE HALLS AND I FEEL SAFE.

16. THE NOISE IN THE LUNCH ROOM IS VERY LOUD AND IT BOTHERS ME.
17. MOST STUDENTS LISTEN TO LUNCH ROOM WORKERS AND FOLLOW DIRECTIONS.
18. THERE ARE NOT MANY FIGHTS IN THE CAFETERIA AND I FEEL SAFE.
19. MOST STUDENTS SIT AND TALK QUIETLY ON THE BUS.
20. THERE ARE NOT MANY FIGHTS ON THE BUS AND I FEEL SAFE.
21. JACOX IS A CLEAN AND NICE LOOKING SCHOOL.
22. THE HALLS IN JACOX LOOK CLEAN AND NICE TO USE.
23. THE BATHROOMS IN JACOX ARE CLEAN AND NICE TO USE.
24. THE WAY THE OUTSIDE OF JACOX LOOKS AND IS KEPT IS NICE.
25. THE CAFETERIA IS A NICE PLACE TO EAT.
26. MY CLASSROOM IS CLEAN AND WELL DECORATED.
27. JACOX'S PLAYGROUND IS KEPT CLEAN AND NICE.

APPENDIX D
TEACHER INTERVIEWS

Table 21

Summary of Teachers Interviewed

Assignment	Race W/B	Gender M/F	
Classroom	8/6	0/14	
Resource	4/1	1/4	
			Total = 19

Table 22

Summary of Experience of Teachers Interviewed

Years of Teaching Experience	Number of Teachers
First year	6
Second year	4
3 to 10 years	3
11 to 30 years	6

Teacher Interviews

During May and early June 1992, semi-structured interviews were held at Jacox Elementary School as part of the research being conducted on the Jacox Elementary School Improvement program. The evaluator conducted each interview. Each interview was audiotaped with the permission of the participants and the evaluator guaranteed that confidentiality of their identity would be maintained. All participants volunteered to be interviewed. The principal assisted the evaluator by announcing at a faculty meeting that volunteers were needed for this portion of the study. The evaluator was given a list of teachers interested in participating in the study. From that list, the evaluator selected two teachers from each grade level (prekindergarten through Grade 5) and five resource teachers. A total of nineteen interviews were conducted.

Each interview lasted between 30 and 50 minutes. Generally teachers with several years of experience in the field elaborated more on the questions asked than the first-year teachers. While each participant was asked the same set of questions, additional questions were asked by the researcher when deemed appropriate. Interviews were scheduled before and after school. In some rare cases, interviews were conducted during a lunch period. The audio tapes of the interviews were transcribed and these transcriptions were used to summarize the findings.

Interview Questions

Background and Experience:

- What is your educational background? Major?
- How many years have you been teaching? How many years have you been teaching in Norfolk Public Schools?

Open-ended Questions:

- Why did you accept a position at Jacox Elementary School, and are you still satisfied with your decision? Why or why not?
- What were your expectations when you accepted a position at Jacox Elementary School?
- What are the realities of the position that you can share with me?
- What are the positive aspects of your position?
- What would you like to change about your position?
- If you had to do it over again, would you accept a position at Jacox Elementary School? Why or why not?
- Is there any additional information you would like to share with me?

Summary of Responses

1) Why did you accept a position at Jacox Elementary School?

Respondents gave more than one reason. The reasons are listed in the order from the most frequently stated reason to the least stated reason.

Reason	Number of Responses
Make a difference	9
Familiar with student population	5
Wanted to work for principal	4
First job offer	4
Wanted to work for Norfolk Public Schools	3
Professional growth opportunity	3
Wanted to work with special needs students	2
Needed a job	2
Chance to have own classroom	1
Wanted the stipend	1
Felt special to be selected	1
Other new teachers at the school	1

2) Are you still satisfied with your decision? Why or why not?

All respondents affirmed that they were satisfied with their decision to accept a position at Jacox Elementary School. The reasons for being satisfied were varied. A summary of those reasons are listed below.

Reason	Number of Responses
Make a difference	8
Supportive administration	5
The children	3
Rapport among teachers	2
Sense of accomplishment	1
Other new teachers	1
Friendships developed	1
Programs offered	1
Opportunities for professional growth	1
Limited commitment	1
Parent support	1
Positive parent comments	1
Coteaching model	1
Quarterly planning time	1

3) What were your expectations when you accepted a position at Jacox Elementary School?

Responses fell into five categories including students, parents, teachers, other, and no expectations. Respondents gave more than one answer. A summary of the responses are presented below.

Expectations

STUDENTS:

- would not listen
- would not follow directions

- would talk back
- would be disrespectful
- would be hungry
- would be unkempt
- would not desire to learn
- would be uncontrollable
- would be physically aggressive
- would be discipline problems
- would be unruly
- would be unmannered
- would lack self-confidence
- would need to be motivated
- would have a short attention span
- would not complete homework

PARENTS:

- would not assist with schoolwork at home
- would offer limited support to the teacher and school

TEACHERS:

- would be dedicated
- would be caring

- would be diverse
- would be young
- would bring new ideas
- would be giving

OTHER:

- would be hard work
- would be a fresh start for the school
- would be challenging
- would improve the school's reputation

NO EXPECTATIONS:

- no firm expectations
 - no preconceived notions
 - none
-

4) What are the realities of the position that you can share with me?

Responses fell into four categories including students, parents, teachers, and other. Respondents gave more than one answer. A summary of the responses are listed below.

Realities

STUDENTS:

- Initially: fought, left the classroom without permission, did not listen, were disrespectful to the teacher and other students, were loud, talked out, and did not do their work
- Respond to positive rewards
- Behavior varies depending on the level of supervision
- Are needy
- Some are well-behaved
- Are eager to learn
- Believe they are liked by teachers this year
- Believe teachers care
- Have reduced fighting
- Are low achievers
- Some are hostile
- Some distrust the teacher
- Some come from difficult homes lives
- Have varied abilities
- Are more knowledgeable than test results indicate
- Are extremely verbal
- Some have low confidence levels

PARENTS:

- Are more trusting of teachers this year
- Are more comfortable with school personnel this year
- Some show support
- Some show prejudice

TEACHERS:

- Are improving
- Are caring
- Like teaching
- Like working with this student population
- Majority work hard
- Most try to learn new approaches
- Keep current
- Have good days and bad days
- Have different attitudes than teachers last year
- Are enthusiastic
- Have a mission
- Work together
- Have positive relationships with other teachers
- Feel safe
- Are loving

OTHER:

- Comfortable building
 - Good support system
 - Learning is going on
 - Enjoyable environment
-

5) What are the positive aspects of your position?

Respondents gave a number of positive aspects about working at Jacox Elementary School. Most respondents gave several answers to the question. The responses are listed from most frequently mentioned to least frequently mentioned. A summary of the responses are listed below.

Positive Aspects	Number of Responses
Administration	13
Faculty	10
Air-conditioning	6
School climate	5
The building	3
Custodial staff	3
Secretarial staff	3
Supplies & materials	3
Cafeteria manager	2
Carpet in classrooms	2
Leeway given	2

Positive Aspects	Number of Responses
Students	2
Class size	2
Classroom	2
* Windows	1
* Storage space	1
Nurse's aide	1
Variety in work	1
Technology	1
Staff development	1
Recognition by administration	1
Feeling valued	1
The salary	1
Rewarding	1
Making a difference	1

6) What would you like to change about your position?

While respondents were generally positive about their working conditions, the researcher was able to elicit suggestions and recommendations for changes. The respondents gave more than one answer. The suggestions and recommendations are listed from most frequently stated to least frequently stated.

Change	Number of Responses
Repairs <ul style="list-style-type: none"> * Repair copy machines promptly * Stock paper towels in classrooms * Repair window shades promptly * Adjust students' desks promptly * Repair broken pencil sharpeners promptly * Fix leaking roof * Stock students' bathrooms with paper towels and trash cans 	8
Increase the number of computers within school and for classroom use	5
Increase supplies available to teachers	4
Add carpet to the classrooms	3
Increase parental involvement	3
Increase hands-on materials for mathematics and science	2
Improve cafeteria supervision and student behavior in the cafeteria	2
Minimize interruptions during instruction	2
Provide each grade level with a reimbursement fund for out-of-pocket expenses	2
Increase supplies of children's literature	2
Provide an ongoing orientation program for new teachers	2
Lower the class size	2
Equip and organize the teachers' workroom	1
Eliminate pull-out programs	1
Improve the interior physical appearance of the school	1
Improve the school's image	1

Change	Number of Responses
Incorporate the performing arts	1
Integrate the school with students from varying socioeconomic backgrounds	1
Enforce the no smoking rule	1
Eliminate grade level team conflicts	1
Add a developmental primary program	1
Experiment with a developmental report card	1
Incorporate more active learning	1
Have a pep song and play it in the morning	1
Increase the size of the auditorium	1
Provide teacher assistants	1
Establish clear roles for resource teachers	1
Provide time for resource teachers to meet together early in the school year	1
Increase volunteers	1
Continue staff development activities	1
Enforce a consistent teaching philosophy	1
Eliminate student failure	1
Provide opportunities for peer observations	1
Provide at least 30 minutes a day for uninterrupted teacher planning time	1
Increase student respect for each other	1

To capture the rationale behind the teachers' suggestions and recommendations for changes, excerpts from their interviews are provided below. The excerpts are organized under the headings from most frequently stated to least frequently stated.

Repairs:

...in the children's bathrooms, no paper towels, no trash cans to throw paper towels in if they had paper towels. A lot of times I'd go use the bathroom and there were no paper towels to dry my hands. The kids complained about that.

...I know a lot of times if we're doing something like maybe using chalk on the chalkboard, we have to stop and get paper towels because the (dispenser) hasn't been filled...

...For weeks we couldn't use the overhead (projector) because the (window) shades were missing...

...Students' desks that were so wobbly that they had to sit at the table...

...Copy machines working and not always having to get someone to fix them or not being able to make a copy or making terrible copies...the children can't hardly read...

...The custodial staff needs to get in the rooms and make sure the pencil sharpeners are working...That's ridiculous for a teacher to have to come in and deal with a broken pencil sharpener...

...The roof needs to be fixed...it leaks water and has ruined some books and things...

Computers:

...more technology in the classrooms...

...Computers in our room...to do more writing and more publishing of the things that they do would be helpful...

...A computer in every classroom...

...I would love to work in a school again that had a computer in (each) classroom...

...more computers...

Supplies & Materials:

...construction paper, pens, markers, crayons, scissors for students, rulers, teacher activity and guide books...

...pencils, notebook paper, spiral notebooks, crayons, poster board for projects, art paper, paint...better desks and chairs for the students, storage space, computer software, plugs in the classroom (electrical outlets)...

...I have spent a fortune this year on things...crayons, scissors, and glue...a lot of them (students) had not had a pack of crayons. It was a novelty to them and they were pocketing the crayons...It would be nice to have a recurring supply of construction paper...

...Supplies...My students don't have supplies...

Carpet in the Classrooms:

...I do a lot of activities on the floor; kids enjoy working on the carpet, laying on the carpet, sitting on the carpet...

...carpet...that kind of makes the room a little cozier for the kids...

...I would like us to have things that would reduce some of the noise so kids don't get blamed for the noise. Like carpet in all the classrooms...

Parental Involvement:

...Parental involvement is the number one concern. I would like to see a kick-off banquet and have hands-on workshops...try to get someone from each child's family or friends involved in that child's education who would follow-up coming to the classroom...and other incentives for parental involvement...

...One thing that I'd like to see is more parental involvement in the school. My kids' behavior and grades improved when the parents actually came in and sat not only with their student, but helped out in the classroom...Kids are more conscious of their behavior when their parents are around.

...I would like to see more parent involvement in the school...

Hands-on Materials:

...That's one thing there aren't enough hands-on materials for science. I had to come up with all those myself. I very rarely use the science book because we did mostly hands-on experience. Unfortunately, I didn't have enough for each kid to do his own experiment. Usually it was me doing the experiment and them participating in it...

...Mathematical hands-on materials...We are doing things right now and we have to plan them at certain times...around other teachers because we have to share them back and forth...

Cafeteria Behavior:

...A lot of times there are problems in the cafeteria. I think maybe more monitors or at least more control...like my lunch... getting them (the students) in line for lunch, getting everyone settled, and finally, by the time I got to eat and with all the interruptions, I had 10 minutes...a lot of times, they (monitors) would call us (the teachers) back early. Five minutes before the end of my lunch time...

...We probably could have a lot more cafeteria management as far as the older kids. It seems to be a problem as far as behavior. With the younger kids being there observing the way the older kids act, they (the younger kids) might think that it's okay for them to act the way in which they see the others acting...For instance, talking loudly, shouting, pushing, getting out of their seats when they are not supposed to, things of that nature...

Interruptions:

...other things would be resource people coming in unexpectedly needing things, asking for things... The intercom...coming on the loud speaker, calling some teacher or calling some student... ...Some teachers, there is one in particular, that instead of calling a grade level

meeting, she keeps sending a runner, a kid, the same note or something over and over again, back and forth when we are trying to teach a lesson...she wants that information right then...

Reimbursement Fund:

...During the year, we do little things like... some of our units, we like to cook and we have to use our money to go out to purchase the items to cook. If we could just have like a little fund, we can go and say, Well, I need...or either just purchase the items and bring it back and then get reimbursed. That would be great. I can't really put a figure on it because not maybe about a \$1000 or a little bit more. I figured out that's around about how much I spent this year...

...I think if we had \$200 a quarter because then you could order all the things you need as far as books and materials...

Children's Literature:

...Teachers are still wanting Big Books, lots of Big Books, and lots of literature sets...

...We could still have more Big Books and little books. You may use one Big Book for a whole week, but what is there, 40 some weeks in a school year... We do borrow between grade levels. Next year I will have some of the same children and I cannot use the same books...

Ongoing Support Program:

...I think we need a more intensive orientation program and not just for beginning teachers... but maybe for everyone who is not sure of the routines. We had an orientation at the beginning of the year, but it was so crammed. It was three days and we were expected to learn everything...maybe something weekly...

...I know I felt like sometimes, "Help. Where do I get the help." Luckily I got the help. If somebody didn't know the answer, we both went and found out...but I think we need a beginning teacher's program...

Class Size:

...An ideal class size to me would be 20 to 22 students...

...I think in general lower class sizes for every grade level not just lower grade levels would make a big difference. I know this year I expected a lower, a much lower class size than I got. I just tried to work with the numbers that I had. I feel like I did the best I could, however, with a lower class size, I could do much more with what I have...

Teachers Workroom:

...I was very frustrated at the beginning of the year because it (the teachers' workroom) was very unorganized, very messy, very hot. It was hard to get copiers, always in line for a copier... They were always broken. That's been a real pain. Even though supplies were available, I felt like they weren't as accessible when I needed them...Having basic things in the workroom like better cutters, better copy machines, paper in the workroom rather than having to bring our own paper to the workroom all the time like we forget. Hole punchers, just things that we can actually go to the workroom and get some work done rather than having to bring our own things and stuff like that...

Pull-out Programs:

...I had part of my class gone every day and it was difficult to plan around that when I had half of a group here for an hour and half of a group there for an hour. It was difficult to do things with the whole class. It would be nice to see less interruptions...

Interior of School:

...another thing which would be nice as far as the physical environment of the school...I've been in a lot of elementary schools and I know this one was constructed for a junior high school...It needs to be more elementary...We're considering painting, but we won't get that until another year, but that would be nice, a better environment...

School Image:

...One thing that really upsets me...I guess, rumors about Jacox. (Such as), "Oh, That's a bad school." Even from the kids. "Oh, My parents don't want me to go to that school. It's a bad school." I've had kids who have transferred from another school say, "Oh, This is a bad school. There is too much fighting. Kids fight a lot. Too much arguing. They didn't do that at my (former) school."

Performing Arts:

...More (of the) arts...dancing, singing, marching, demonstrating their abilities in the performing arts...

Varying Socioeconomic Levels:

...I'm not sure if these children...they always eat together, work together, live together...They need to see that this is not how life is...This is not how the world is made up...They need to see other children in their age (group) acting differently...middle class or upper class (children)...The school to be a little bit more integrated so they (the students) would have other children to emulate...

Developmental Program:

...I would like to see some kind of developmental program, maybe some multi-age level classrooms, particularly in the primary end of the school...

Developmental Report Card:

...One thing that's hard for us is to send home a report card for a child who works hard that says D(s)...And a developmental report card because I really feel like they (the students) need a sense of success not failure...

Active Learning:

...I would like to see teachers doing more active things...I would like to see less disciplining and more active involvement...I think if the kids were actively involved in what they were doing... they wouldn't have as many problems...

Smoking:

...Also, smoking...There are still some people in the school and it is not (teachers) that I see smoking in the building. Because my kids stay after (school) and help me with things, they see them smoking...one person in particular...

Grade Level Conflicts:

...For planning...I feel like my team didn't work really as well as we could have. There was resentment with some of the teachers, I felt. Because of different styles in teaching and different levels of experience, I feel like we weren't very unified. I feel like next year I'd like to be able to work more as a team...

Pep Song:

...The only thing I think we need in the mornings is we could use a pep song to kind of pep the kids up to get ready for the school day...

Auditorium:

...We need a large auditorium. We don't have enough seats for our kids. All of them can't go to the programs at the same time...

Teacher Assistants:

...Every classroom needs an assistant...They'd (the students) have another support system that could say, "You've done a good job." Because these children need attention...

Resource Teachers:

...I wasn't sure of my role. What she (the principal) wanted of me...

Meetings for Resource Teachers:

...I wish that the resource people had had more of an opportunity to come together in the beginning (of the school year)...

Students Respecting Each Other:

...If I could change something over night, it would be the way the children treat each other...

Volunteers:

...Having more volunteers or parents in the room to help would be helpful...

Staff Development:

...I just want to grow more...Learn more about different topics...I just want to keep growing myself...

Teaching Philosophy:

...People were hired here to teach in a certain way and some of them (the teachers) are not accepting that...I feel maybe that could change... I've been in classrooms and I know that they're not teaching in the style I thought we were supposed to be doing...

Student Failure:

...I still see children feeling a lot of failure... They need to have a sense of success not failure...

Peer Observations:

...I would like to be able to leave my class and observe what another teacher's doing in another class...

Planning Time:

.. It would be nice to have...any planning time during the day...on a regular basis...Thirty minutes would be ideal...

- 7) If you had to do it over again, would you accept a position at Jacox Elementary School? Why or why not?

All respondents indicated that they would do it over again by responding with comments such as yes, definitely, and no doubt. Some respondents elaborated. Their comments are presented below.

Positives outweigh the negatives:

...It's been a very good year. No job is without its aggravations...for every bad thing that I can think of, there are five positive things I can think of (as to) why I should be here and why I made the right decision...

Help children:

...I probably would...just because I like to help children...

The faculty and children:

...I'm happy here. I like coming to work. I like the teachers who I work with. I love the children that I teach. They're (the students) excited and enthusiastic and they have so much to give. When you give to them, they have so much to give back. I just enjoy coming to work. It's really pleasant here...

Mission:

...I feel that I have a mission here to help do what needs to be done...Try some of the things that the school system wants...

Enjoy the work and the kids:

...I love it here. I love what I'm doing and I love the kids...

Enjoyment:

...I think this was a very, very smart move. I enjoy being here...

Make a difference:

...I think the kids are hard...but it's also very gratifying to see when you work hard with a child and you see by April such a difference in the kids' attitudes and the way they work with one another and how they relate to people and their self-concept...The fact that they can read and write and do math. It all makes it worthwhile. That's what we're all working for together...

...I am from Norfolk. I attended all Norfolk public schools. I also went to a community school. Kids are just kids. They need somebody to love them and teach them. That's what my life is all about...

...I love Jacox. I enjoy my job. I love getting up and coming to Jacox because I realize that each day is a challenge. That there are no two days alike. That I'm ready because in that day I know that I'm going to make...to help make some child successful...

Support system and students:

...One major reason is the support that I feel... lot of us are brand new, and we are in it together. That's what has pulled me through a lot of days is that I know somebody next door has gone through the same thing I have gone through that day. I've made great friends. The students have been difficult, but they've been fun and funny...They really have a great sense of humor...They don't test as well as some other students on national scores, but they are very, many of them are just very smart, very bright and funny... ...Strong faculty support...

The administration:

...If the same people were in charge. If they came tomorrow and said, We're moving (the principal) and (the assistant principal) and bringing new people in, I would be the first one out the door...

8) Is there any additional information you would like to share with me?

The majority of the respondents felt that previous questions had covered the information they wanted to share. Some respondents had additional information which is presented below.

Former principal:

...I think (former principal) did a marvelous job. (The former principal) spilled her blood for this school so that this transition we have now could take place...

Male teachers:

...I would like to see more males in the school system. Black males or even white males...

Class size:

...I would like to see at Jacox maybe not more than 15 students in a classroom...I'm able to get around to every child more. They wouldn't fight when I put them in a center or take things from each other or fuss. They would get along much better. They would be able to help each other with problems and everything...

Resource teachers:

...I would like to see other resource people coming in or either pulling them (students) out...

Training for inclusion model:

...If we're gonna have teachers involved in an inclusion model...never having been trained to handle special needs...it's not gonna work. So if you don't have time to train your staff, then you better postpone it...

Allow for individuality among teachers:

...One thing that's been difficult for me... last year I was at a school that was very supportive of each other and what we were doing. There's that here too, but in some instances there isn't. I feel more this year that I'm being more looked down upon by certain things that I do...I do what I think is best...

Opportunities to experience new things:

...I'm really excited about next year because I'm trying something new...I'm really excited about it because the people that I'll be working with...we just get along really, really well...we're gonna plan all summer...

Support system for new teachers:

...At the beginning of the school year, we had a ton of new teachers. I don't think the experienced teachers were as understanding and supportive as they needed to be. I think a lot of them forgot the days when they were first-year teachers...

...I think in restaffing the school, because it was such a big undertaking, we had so many new teachers. We had not just brand new teachers,

but teachers from other school systems and other schools...We had only three trained mentors in the school. (The principal) made a list and gave each teacher who had either been here before or had been in another Norfolk school...made them the mentors...which was nice in theory except the mentors didn't know what they were supposed to do...In hindsight, I would have suggested that we made a mentor team. The mentors could have gotten together and planned some things for the mentees and really explained to the mentees what they were supposed to do. It just would have eased the whole process a lot because there were so many new things to go over and share...

Fresh ideas:

...I believe the restaffing was beneficial. We have a staff of teachers with positive attitudes and we are role models...This year teachers have brought in so many fresh ideas... that flows to the students. It flows from the students to the parents. Yes, I think it was a good change...

The faculty:

...One thing I wanted to say was I was just so happy with the faculty...It is just very relaxed, there is no tension. At my school last year, I was very intimidated...They are really neat, a neat faculty...

...I think we really have a good staff, understanding staff here. Everybody pitches in to help...It is just like a new beginning of a family...

Continue staff development:

...I just feel like everyday I learn more and more about how to approach this topic... This is the first year I've ever gotten to go to an outside (of the school system) workshop. I would like to do a whole lot of those...It really does invigorate you and revitalize your thinking if you can do those things...

VITA

LYNNE HAGENS-MEEKS
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PERSONAL

- Born April 28, 1952, in Norfolk, Virginia

EDUCATION

Virginia Polytechnic Institute and State University
Currently Doctoral Candidate in Educational Administration

Virginia Polytechnic Institute and State University
Certificate of Advanced Graduate Study, 1992

The George Washington University
Education Specialist Degree, 1989

Old Dominion University
M. S. Early Childhood Education, 1977
B. S. Elementary Education, 1974

Lake Taylor High School
High School Diploma, 1970

EMPLOYMENT HISTORY

7/90 - Present Personnel Coordinator, Norfolk Public Schools

9/88 - 6/90 Teacher Specialist, Office of Communication Skills,
Department of Instruction, Norfolk Public Schools

11/86 - 8/88 Teacher Specialist, Generalist, Department of Instruction,
Norfolk Public Schools

12/80 - 10/86 Teacher, Ghent Elementary School, Norfolk Public Schools

8/79 - 6/80 Teacher, Compton Avenue Elementary School,
Los Angeles Unified School District

8/74 - 6/77 Teacher, Douglass Park Elementary School,
Portsmouth Public Schools

ADDITIONAL EXPERIENCES

- Facilitated & conducted workshops
- Served as a guest speaker
- Presented at conferences
- Developed curriculum
- Served as a cooperating teacher
- Provided instructional assistance to teachers
- Served as a teacher recruiter

OTHER QUALIFICATIONS

- Trained to administer the SRT Teacher Perceiver
- Trained as a principal assessor
- Trained to administer a variety of personnel department functions including VRS retirement counseling, sexual harassment investigations, bloodborne pathogens training, teacher recruitment, employee/employer relations, and formative and summative evaluation procedures
- Endorsed for elementary principal & supervisor
- Endorsed to teach kindergarten - seventh grades

PROFESSIONAL MEMBERSHIP

- Norfolk Reading Council

- Virginia State Reading Council
- International Reading Council
- Virginia Association for Supervision & Curriculum Development
- Association for Supervision & Curriculum Development
- Norfolk Association of Central Office Administrators
- Tidewater Association of School Personnel Administrators


Lynne Hagens Meeks